STIC Search Report
EIC 1700

STIC Database Tracking Number: 179456

TO: Satya Sastri **Location: REM 10A30** **Art Unit : 1713** **February 15, 2006** **Case Serial Number: 10/723510**	**From: Les Henderson** **Location: EIC 1700** **REM 4B28 / 4A30** **Phone: 571-272-2538** **Leslie.henderson@uspto.gov**

Search Notes

STIC Search Results Feedback Form

EIC17000

Questions about the scope or the results of the search? Contact ***the EIC searcher or contact:***

Kathleen Fuller, EIC 1700 Team Leader
571/272-2505 REMSEN 4B28

Voluntary Results Feedback Form

- *I am an examiner in Workgroup:* ☐ *Example: 1713*
- *Relevant prior art **found**, search results used as follows:*
  - ☐ 102 rejection
  - ☐ 103 rejection
  - ☐ Cited as being of interest.
  - ☐ Helped examiner better understand the invention.
  - ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
  (journal articles, conference proceedings, new product announcements etc.)

- *Relevant prior art **not found:***
  - ☐ Results verified the lack of relevant prior art (helped determine patentability).
  - ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to EIC1700 REMSEN 4B28

Access DB# 179456

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Satya Dastri Examiner #: 79815 Date: _____
Art Unit: 1713 Phone Number 30_____ Serial Number: 10/723,510
Mail Box and Bldg/Room Location: Rem 10A 36 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

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Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Biochemical oligomeric composition and use

Inventors (please provide full names): Coppens, and Godefroidt (thereof) & Jariwala

Earliest Priority Filing Date: _____

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

****

STAFF USE ONLY	Type of Search		Vendors and cost where applicable	
Searcher: YH	NA Sequence (#)		STN	$ 1,225.97
Searcher Phone #:	AA Sequence (#)		Dialog	
Searcher Location:	Structure (#)	5	Questel/Orbit	
Date Searcher Picked Up:	Bibliographic		Dr.Link	
Date Completed: 3/16/06	Litigation		Lexis/Nexis	
Searcher Prep & Review Time: 30	Fulltext		Sequence Systems	
Clerical Prep Time: 30 ~~300~~ YH	Patent Family		WWW/Internet	
Online Time: 270	Other		Other (specify)	

PTO-1590 (8-01)

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Bib Data Sheet

SERIAL NUMBER	FILING DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
10/723,510	11/26/2003 RULE	524	1713	59369US002

APPLICANTS

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Frank A. H. M. Godefroidt, Oudenaarde, BELGIUM;

** CONTINUING DATA **********

none as 11/30/05

** FOREIGN APPLICATIONS **********

IF REQUIRED, FOREIGN FILING LICENSE GRANTED
** 02/26/2004

Foreign Priority claimed ☐ yes ☒ no 35 USC 119 (a-d) conditions met ☐ yes ☐ no ☐ Met after Allowance Verified and Acknowledged Examiner's Signature Initials	STATE OR COUNTRY MN	SHEETS DRAWING 0	TOTAL CLAIMS 26	INDEPENDENT CLAIMS 1

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3M INNOVATIVE PROPERTIES COMPANY
PO BOX 33427
ST. PAUL , MN
55133-3427

TITLE
Fluorochemical oligomeric composition and use thereof

FILING FEE RECEIVED 878	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:	☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue)

Fluorochemical Oligomeric Composition And Use Thereof

Abstract

A method of treating fibrous substrates by contacting the substrate with a fluorochemical composition comprising: a fluorochemical oligomeric component and an antisoiling component is described. The compositions provide desirable antisoiling properties, as well as oil, water and stain repellency to fibrous substrates.

Amendments to the Claims:

The following Listing of Claims will replace all prior versions, and listings, of claims in the application:

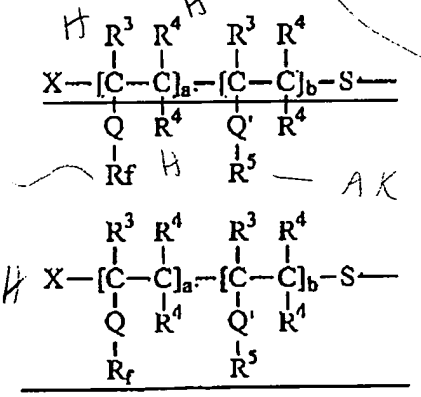
Listing of Claims

1. (Currently amended) A composition comprising

a) a fluorochemical oligomeric compound of the formula:

$(A\text{-}L^1\text{-})_n[R^1\text{-}(L^2\text{-}R^2)_m]_n$ ~~$(A\text{-}L^1\text{-})_n[R^1\text{-}(L^2\text{-}R^2)_m]_p$~~, wherein

A is a fluorochemical oligomeric moiety of the formula



wherein the sum of a + b is a [[an]] number such that the compound is oligomeric, and a is at least 1;

R^3 is hydrogen, halogen, or straight chain or branched chain alkyl containing 1 to about 4 carbon atoms;

each R^4 is independently hydrogen or straight chain or branched chain alkyl containing 1 to about 4 carbon atoms;

Q and Q' are each independently a covalent bond or an organic linking group,

R_f is a fluoroaliphatic group that comprises a fully fluorinated terminal group;

R^5 is a fluorine-free aliphatic group;

X is a hydrogen atom or a group derived from a free radical initiator;

L^1 and L^2 are independently divalent linking groups,

R^1 is the residue of an organic isocyanate,

R^2 is a hydrogen or an aliphatic group,

n is 1 to 4, m is 0 to 4, and p is 1 to 4,

wherein at least one of said R^2 and R^5 groups has 12 or more carbon atoms; and

b) an antisoiling compound.

2. (Original) The composition of claim 1 wherein the ratio of a to b of said fluorochemical oligomer a), is at least 2:1.

3. (Original) The composition of claim 1, wherein R_f has the structure C_oF_{2o+1}, where o is 3 to 7.

4. (Original) The composition of claim 1, wherein each of L^1 and L^2 are derived from the reaction of a nucleophilic group with an isocyanate group.

5. (Original) The composition of claim 4 wherein L^1 and L^2 are independently selected from a ureylene, a urethanylbiuretylene, a guanidinylene and a carbodiimidylene.

6. (Original) The composition of claim 1 wherein a+b of said oligomeric moiety is 3 to 20.

7. (Original) The composition of claim 1 wherein the ratio of component a) to component b) is 1:20 to 20:1.

8. (Original) The composition of claim 1, wherein Q and Q' of said fluorochemical oligomer are independently selected from the following structures, wherein each k is independently an integer from 0 to about 20, R_1' is hydrogen, aryl, or alkyl of 1 to about 4 carbon atoms, and R_2' is alkyl of 1 to about 20 carbon atoms: 1-20 AK $k = 0-20$

$-SO_2NR_1'(CH_2)_kO(O)C-$	$-CONR_1'(CH_2)_kO(O)C-$
$-(CH_2)_kO(O)C-$	$-CH_2CH(OR_2')CH_2O(O)C-$
$-(CH_2)_kC(O)O-$	$-(CH_2)_kSC(O)-$

$-(CH_2)_kO(CH_2)_kO(O)C-$	$-(CH_2)_kS(CH_2)_kO(O)C-$
$-(CH_2)_kSO_2(CH_2)_kO(O)C-$	$-(CH_2)_kS(CH_2)_kOC(O)-$
$-(CH_2)_kSO_2NR_1'(CH_2)_kO(O)C-$	$-(CH_2)_kSO_2-$
$-SO_2NR_1'(CH_2)_kO-$	$-SO_2NR_1'(CH_2)_k-$
$-(CH_2)_kO(CH_2)_kC(O)O-$	$-(CH_2)_kSO_2NR_1'(CH_2)_kC(O)O-$
$-(CH_2)_kSO_2(CH_2)_kC(O)O-$	$-CONR_1'(CH_2)_kC(O)O-$
$-(CH_2)_kS(CH_2)_kC(O)O-$	$-CH_2CH(OR_2')CH_2C(O)O-$
$-SO_2NR_1'(CH_2)_kC(O)O-$	$-(CH_2)_kO-$
$-C_kH_{2k}-OC(O)NH-$	$-C_kH_{2k}-NR_1'C(O)NH-$,
$-OC(O)NR'(CH_2)_k-$	$-(CH_2)_kNR_1'-$ and
$-(CH_2)_kNR_1'C(O)O-$	

9. (Original) The composition of claim 1 wherein said R^2 group is an aliphatic group of 12 to 75 carbon atoms.

10. (Original) The composition of claim 1 wherein the sum of carbons atoms in said R^2 and R^5 groups is 12 to 100.

11. (Original) The composition of claim 1 wherein said antisoiling compound is selected from a methacrylic ester polymer, colloidal alumina, colloidal silica, a silsesquioxane, polyvinylpyrrolidone and a water-soluble condensation polymer comprising the reaction product of formaldehyde and an amine.

12. (Original) The composition of claim 1 wherein said antisoiling compound comprises a water-insoluble addition polymers derived from a polymerizable ethylenically unsaturated monomer free of non-vinylic fluorine, the polymer having at least one major transition temperature higher than about 25°C .

13. (Original) The composition of claim 1, where b of said fluorochemical oligomeric moiety is 0.

14. (Original) The composition of claim 1, wherein R^1 is the residue of an aliphatic or aromatic polyisocyanate.

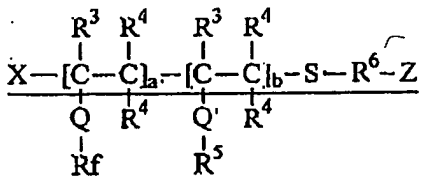
15. (Original) The composition of claim 1 wherein the ratio of component a) to component b) is 1:10 to 10:1.

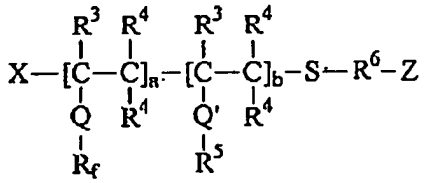
16. (Original) The composition of claim 1, wherein said antisoiling (component b)) is selected from the group of (meth)acrylic ester (co)polymers, colloidal alumina, colloidal silica, silsesquioxanes, poly(vinylpyrrolidone) and styrene-maleic anhydride copolymers.

17. (Original) The composition of claim 16 wherein said antisoiling agent comprises ethyl methacrylate/methyl methacrylate copolymer.

18. (Currently amended) The composition of claim 1, wherein said fluorochemical oligomeric component is the reaction product of

a) a fluorochemical oligomer of the formula





wherein

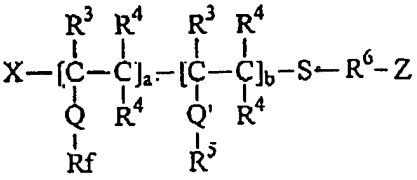
R^6 is an aliphatic or aromatic group and Z is an isocyanate-reactive group,

b) a isocyanate of the formula $R^1(NCO)_x$, wherein x is 1 to 6, wherein R^1 is an aliphatic, alicyclic or aromatic group, and

c) an aliphatic compound of the formula R^2-$(Z)_q$, where R^2 is a aliphatic group, Z is an isocyanate reactive group and q is 1 to 4.

19. (Original) The composition of claim 1, wherein said fluorochemical oligomeric component is the reaction product of

a) a fluorochemical oligomer of the formula



wherein

R^6 is an aliphatic or aromatic group,

R^5 is a non-fluorinated aliphatic group of 12 to 75 carbons atoms, and

Z is an isocyanate-reactive group, and

b) an isocyanate of the formula $R^1(NCO)_x$, wherein x is 1 to 6, wherein R^1 is an aliphatic, alicyclic or aromatic group.

20. (Original) A coating composition comprising a mixture of:

a) a solvent; and

b) the composition of Claim 1.

21. (Original) The coating composition of claim 20 wherein said mixture comprises an aqueous solution, dispersion or suspension.

22. (Original) The coating composition of claim 20 further comprising a surfactant.

23. (Original) The coating composition of claim 20 comprising 0.1 to 50 weight percent of said composition of claim 1 .

24. (Original) An article comprising:

a substrate having one or more surfaces; and

the fluorochemical composition of Claim 1 coated on one or more surfaces of said substrate.

25. (Original) The article of Claim 24 wherein the substrate is a fibrous substrates.

26. (Original) A method of imparting repellency and antisoiling to a substrate, having one or more surfaces, comprising the steps of:

applying the coating composition of claim 20 onto one or more surfaces of said substrate; and

curing the coating composition at ambient or elevated temperature.

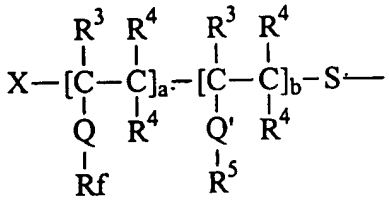
We claim:

1. A composition comprising

a) a fluorochemical oligomeric compound of the formula:

$(A\text{-}L^1\text{-})_n[R1\text{-}(L^2\text{-}R^2)_m]_p$, wherein

A is a fluorochemical oligomeric moiety of the formula



wherein the sum of a + b is an number such that the compound is oligomeric, and a is at least 1;

R^3 is hydrogen, halogen, or straight chain or branched chain alkyl containing 1 to about 4 carbon atoms;

each R^4 is independently hydrogen or straight chain or branched chain alkyl containing 1 to about 4 carbon atoms;

Q and Q' are each independently a covalent bond or an organic linking group,

R_f is a fluoroaliphatic group that comprises a fully fluorinated terminal group;

R^5 is a fluorine-free aliphatic group;

X is a hydrogen atom or a group derived from a free radical initiator;

L^1 and L^2 are independently divalent linking groups,

R^1 is the residue of an organic isocyanate,

R^2 is a hydrogen or an aliphatic group,

n is 1 to 4, m is 0 to 4, and p is 1 to 4,

wherein at least one of said R^2 and R^5 groups has 12 or more carbon atoms; and

b) an antisoiling compound.

2. The composition of claim 1 wherein the ratio of a to b of said fluorochemical oligomer a), is at least 2:1.

3. The composition of claim 1, wherein R_f has the structure C_oF_{2o+1}, where o is 3 to 7.

4. The composition of claim 1, wherein each of L^1 and L^2 are derived from the reaction of a nucleophilic group with an isocyanate group.

5. The composition of claim 4 wherein L^1 and L^2 are independently selected from a ureylene, a urethanylbiuretylene, a guanidinylene and a carbodiimidylene.

6. The composition of claim 1 wherein a+b of said oligomeric moiety is 3 to 20.

7. The composition of claim 1 wherein the ratio of component a) to component b) is 1:20 to 20:1.

8. The composition of claim 1, wherein Q and Q' of said fluorochemical oligomer are independently selected from the following structures, wherein each k is independently an integer from 0 to about 20, R_1' is hydrogen, aryl, or alkyl of 1 to about 4 carbon atoms, and R_2 ' is alkyl of 1 to about 20 carbon atoms:

$-SO_2NR_1'(CH_2)_kO(O)C-$	$-CONR_1'(CH_2)_kO(O)C-$
$-(CH_2)_kO(O)C-$	$-CH_2CH(OR_2')CH_2O(O)C-$
$-(CH_2)_kC(O)O-$	$-(CH_2)_kSC(O)-$
$-(CH_2)_kO(CH_2)_kO(O)C-$	$-(CH_2)_kS(CH_2)_kO(O)C-$
$-(CH_2)_kSO_2(CH_2)_kO(O)C-$	$-(CH_2)_kS(CH_2)_kOC(O)-$
$-(CH_2)_kSO_2NR_1'(CH_2)_kO(O)C-$	$-(CH_2)_kSO_2-$
$-SO_2NR_1'(CH_2)_kO-$	$-SO_2NR_1'(CH_2)_k-$
$-(CH_2)_kO(CH_2)_kC(O)O-$	$-(CH_2)_kSO_2NR_1'(CH_2)_kC(O)O-$
$-(CH_2)_kSO_2(CH_2)_kC(O)O-$	$-CONR_1'(CH_2)_kC(O)O-$
$-(CH_2)_kS(CH_2)_kC(O)O-$	$-CH_2CH(OR_2')CH_2C(O)O-$
$-SO_2NR_1'(CH_2)_kC(O)O-$	$-(CH_2)_kO-$
$-C_kH_{2k}-OC(O)NH-$	$-C_kH_{2k}-NR_1'C(O)NH-$,
$-OC(O)NR'(CH_2)_k-$	$-(CH_2)_kNR_1'-$ and
$-(CH_2)_kNR_1'C(O)O-$	

9. The composition of claim 1 wherein said R^2 group is an aliphatic group of 12 to 75 carbon atoms.

10. The composition of claim 1 wherein the sum of carbons atoms in said R^2 and R^5 groups is 12 to 100.

11. The composition of claim 1 wherein said antisoiling compound is selected from a methacrylic ester polymer, colloidal alumina, colloidal silica, a silsesquioxane, polyvinylpyrrolidone and a water-soluble condensation polymer comprising the reaction product of formaldehyde and an amine.

12. The composition of claim 1 wherein said antisoiling compound comprises a water-insoluble addition polymers derived from a polymerizable ethylenically unsaturated monomer free of non-vinylic fluorine, the polymer having at least one major transition temperature higher than about 25°C .

13. The composition of claim 1, where b of said fluorochemical oligomeric moiety is 0.

14. The composition of claim 1, wherein R^1 is the residue of an aliphatic or aromatic polyisocyanate.

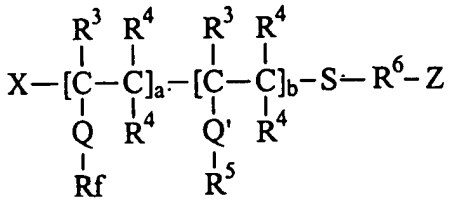
15. The composition of claim 1 wherein the ratio of component a) to component b) is 1:10 to 10:1.

16. The composition of claim 1, wherein said antisoiling (component b)) is selected from the group of (meth)acrylic ester (co)polymers, colloidal alumina, colloidal silica, silsesquioxanes, poly(vinylpyrrolidone) and styrene-maleic anhydride copolymers.

17. The composition of claim 16 wherein said antisoiling agent comprises ethyl methacrylate/methyl methacrylate copolymer.

18. The composition of claim 1, wherein said fluorochemical oligomeric component is the reaction product of

a) a fluorochemical oligomer of the formula



wherein

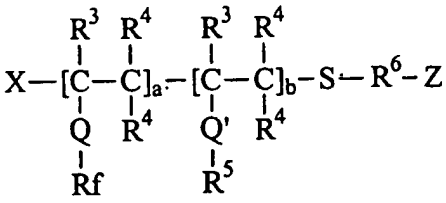
R^6 is an aliphatic or aromatic group and Z is an isocyanate-reactive group,

b) a isocyanate of the formula $R^1(NCO)_x$, wherein x is 1 to 6, wherein R^1 is an aliphatic, alicyclic or aromatic group, and

c) an aliphatic compound of the formula R^2-$(Z)_q$, where R^2 is a aliphatic group, Z is an isocyanate reactive group and q is 1 to 4.

19. The composition of claim 1, wherein said fluorochemical oligomeric component is the reaction product of

a) a fluorochemical oligomer of the formula



wherein

R^6 is an aliphatic or aromatic group,

R^5 is a non-fluorinated aliphatic group of 12 to 75 carbons atoms, and

Z is an isocyanate-reactive group, and

b) an isocyanate of the formula $R^1(NCO)_x$, wherein x is 1 to 6, wherein R^1 is an aliphatic, alicyclic or aromatic group.

20. A coating composition comprising a mixture of:

a) a solvent; and

b) the composition of Claim 1.

21. The coating composition of claim 20 wherein said mixture comprises an aqueous solution, dispersion or suspension.

22. The coating composition of claim 20 further comprising a surfactant.

23. The coating composition of claim 20 comprising 0.1 to 50 weight percent of said composition of claim 1 .

24. An article comprising:

a substrate having one or more surfaces; and

the fluorochemical composition of Claim 1 coated on one or more surfaces of said substrate.

25. The article of Claim 24 wherein the substrate is a fibrous substrates.

26. A method of imparting repellency and antisoiling to a substrate, having one or more surfaces, comprising the steps of:

applying the coating composition of claim 20 onto one or more surfaces of said substrate; and

curing the coating composition at ambient or elevated temperature.

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                 D ALL
                 SEL RN

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L50            1 SEA ABB=ON  PLU=ON  112-96-9/RN
                 D SCAN
                 E POLYCARBODIIMIDE/PCT
L51         1176 SEA ABB=ON  PLU=ON  POLYCARBODIIMIDE/PCT
L52            0 SEA ABB=ON  PLU=ON  L44 AND L5
L53            0 SEA ABB=ON  PLU=ON  L51 AND L5
                 D QUE STAT L36
```

```
     FILE 'HCAPLUS' ENTERED AT 15:04:11 ON 15 FEB 2006
L54        23393 SEA ABB=ON  PLU=ON  L5
L55            5 SEA ABB=ON  PLU=ON  L26
L56        18293 SEA ABB=ON  PLU=ON  L10
L57          238 SEA ABB=ON  PLU=ON  L17
L58         1833 SEA ABB=ON  PLU=ON  L24
                 D QUE STAT L17
                 D QUE STAT L24

     FILE 'REGISTRY' ENTERED AT 15:07:06 ON 15 FEB 2006
L59          413 SEA ABB=ON  PLU=ON  L17 AND L24

     FILE 'HCAPLUS' ENTERED AT 15:07:28 ON 15 FEB 2006
L60          121 SEA ABB=ON  PLU=ON  L59
                 D SCAN L55
L61          165 SEA ABB=ON  PLU=ON  L45/D OR L45/DP
L62            1 SEA ABB=ON  PLU=ON  L46/D OR L46/DP
L63          509 SEA ABB=ON  PLU=ON  L47/D OR L47/DP
L64           77 SEA ABB=ON  PLU=ON  L48/D OR L48/DP
L65            5 SEA ABB=ON  PLU=ON  L49/D OR L49/DP
L66          299 SEA ABB=ON  PLU=ON  L50/D OR L50/DP
L67           90 SEA ABB=ON  PLU=ON  L36
L68          140 SEA ABB=ON  PLU=ON  L57 AND L58
L69         3348 SEA ABB=ON  PLU=ON  L30
L70           14 SEA ABB=ON  PLU=ON  L37
                 D SCAN TI
L71            3 SEA ABB=ON  PLU=ON  L43
                 D SCAN TI
L72            0 SEA ABB=ON  PLU=ON  L67 AND ((L61 OR L62 OR L63 OR L64
                 OR L65 OR L66))
L73           64 SEA ABB=ON  PLU=ON  L54 AND ((L61 OR L62 OR L63 OR L64
                 OR L65 OR L66))
L74        56395 SEA ABB=ON  PLU=ON  L38
L75         3185 SEA ABB=ON  PLU=ON  L39
L76       144447 SEA ABB=ON  PLU=ON  L40
L77        10203 SEA ABB=ON  PLU=ON  L41
L78          387 SEA ABB=ON  PLU=ON  L54 AND ((L74 OR L75 OR L76 OR
                 L77) OR ?UREYLEN? OR ?URETHANYLBIURETYL? OR ?URETHAN?(A
                 )?BIURIETYL? OR ?GUANIDIN? OR ?CARBODIIMID?)
L79          328 SEA ABB=ON  PLU=ON  L54 AND ((L74 OR L75 OR L76 OR
                 L77))
L80       113402 SEA ABB=ON  PLU=ON  FIBER?/SC,SX
L81            0 SEA ABB=ON  PLU=ON  L67 AND ((L61 OR L62 OR L63 OR L64
                 OR L65 OR L66))
L82            3 SEA ABB=ON  PLU=ON  L67 AND ((L74 OR L75 OR L76 OR
                 L77) OR ?UREYLEN? OR ?URETHANYLBIURETYL? OR ?URETHAN?(A
                 )?BIURIETYL? OR ?GUANIDIN? OR ?CARBODIIMID?)
L83            1 SEA ABB=ON  PLU=ON  L1 AND L10
L84          557 SEA ABB=ON  PLU=ON  L80 AND L56
L85            8 SEA ABB=ON  PLU=ON  L80 AND L57
L86          140 SEA ABB=ON  PLU=ON  L60 OR L68
L87            8 SEA ABB=ON  PLU=ON  L86 AND L80
L88       270766 SEA ABB=ON  PLU=ON  COAT?/SC,SX
L89            5 SEA ABB=ON  PLU=ON  L86 AND L88
L90         2063 SEA ABB=ON  PLU=ON  L56 AND L88
L91           85 SEA ABB=ON  PLU=ON  L90 AND L80
                 E COATINGS/CT
L92         7724 SEA ABB=ON  PLU=ON  COATINGS/CT
                 E COATING PROCESS/CT
L93       125107 SEA ABB=ON  PLU=ON  COATING PROCESS/CT
L94       271789 SEA ABB=ON  PLU=ON  COATING MATERIALS/CT
                 E COATING MATERIALS/CT
L95         2026 SEA ABB=ON  PLU=ON  L56 AND ((L92 OR L93 OR L94))
L96        21863 SEA ABB=ON  PLU=ON  ANTISOIL? OR (ANTI OR REPEL? OR
                 PREVENT? STOP?)(A)(SOIL? OR DIRT? OR DUST? OR WATER?
```

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                OR OIL?)
L97         1931 SEA ABB=ON  PLU=ON  L96 AND L56
L98          707 SEA ABB=ON  PLU=ON  L95 AND L97
L99         3541 SEA ABB=ON  PLU=ON  ANTISOIL? OR ANTI(A)SOIL?
L100         256 SEA ABB=ON  PLU=ON  L56 AND L99
L101     1001477 SEA ABB=ON  PLU=ON  FIBER? OR FIBR?
L102          47 SEA ABB=ON  PLU=ON  L101 AND L100
L103      301171 SEA ABB=ON  PLU=ON  TEXTIL?/SC,SX
L104          99 SEA ABB=ON  PLU=ON  L56 AND L88 AND (L103 OR L80)
L105           1 SEA ABB=ON  PLU=ON  L67 AND L88 AND (L103 OR L80)
                  D SCAN
L106              QUE ABB=ON  PLU=ON  FABRIC? OR TEXTILE? OR CLOTH? OR
                  GARMENT? OR NAPER OR DRAPER OR WEAV? OR WOVE? OR WEFT?
                  OR WEB? OR SPIN? OR SPUN? OR FIBER? OR FIBRE# OR NET
                  OR NETTING?
L107         147 SEA ABB=ON  PLU=ON  L106 AND L98
L108           5 SEA ABB=ON  PLU=ON  L78 AND L107
L109           5 SEA ABB=ON  PLU=ON  L73 AND L107
L110           1 SEA ABB=ON  PLU=ON  L67 AND L107
L111          96 SEA ABB=ON  PLU=ON  L104 AND L106
L112          66 SEA ABB=ON  PLU=ON  L111 AND L96
L113          15 SEA ABB=ON  PLU=ON  L111 AND L99
L114          46 SEA ABB=ON  PLU=ON  L55 OR L70 OR L71 OR L82 OR L85 OR
                  L87 OR L89 OR L105 OR (L108 OR L109 OR L110)
L115           1 SEA ABB=ON  PLU=ON  L1 AND L114
L116          57 SEA ABB=ON  PLU=ON  L114 OR L113
L117          11 SEA ABB=ON  PLU=ON  L116 NOT L114
                  D QUE STAT
                  D QUE STAT L114


=> => d que stat l114
L2            13 SEA FILE=REGISTRY ABB=ON  PLU=ON  (104559-01-5/BI OR
                  112-92-5/BI OR 112-96-9/BI OR 1344-28-1/BI OR 25038-54-
                  4/BI OR 25085-53-4/BI OR 25685-29-4/BI OR 306997-46-6/B
                  I OR 32131-17-2/BI OR 53200-31-0/BI OR 7631-86-9/BI OR
                  852161-27-4/BI OR 9003-39-8/BI)
L3                SCR 1918 OR 1838
L4                STR

C~~C        F~Ak~CF3
1   2       3   4   5


NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT   IS LIN  SAT  AT   4
DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS M3-X7 C  AT   4

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   5

STEREO ATTRIBUTES: NONE
L5         29911 SEA FILE=REGISTRY SSS FUL L4 NOT L3
L6               SCR 1918 OR 1838
L7               STR

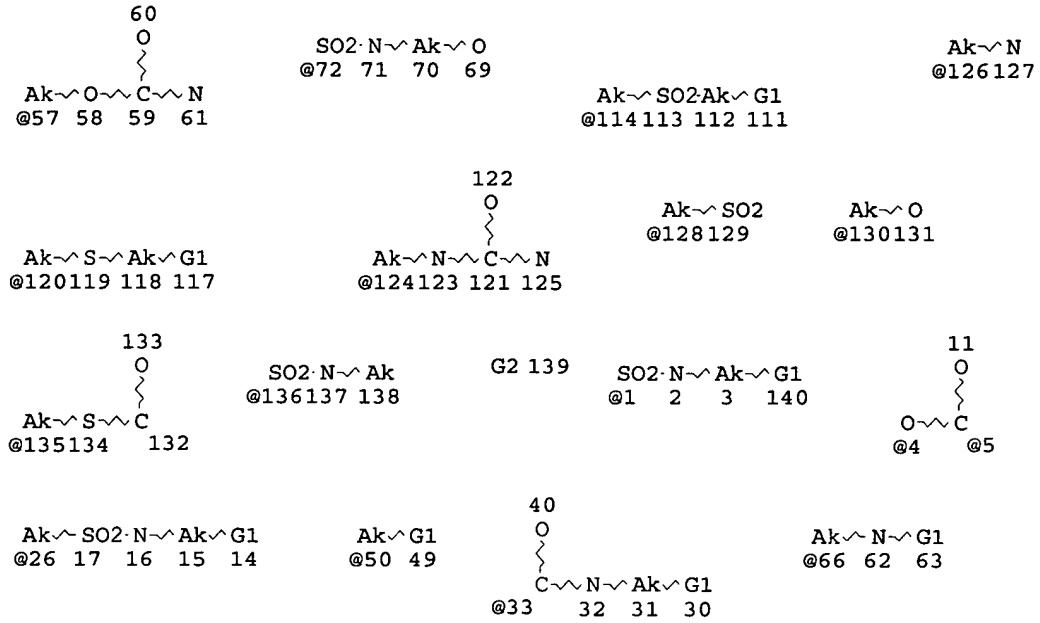
C~~C        F~Ak~CF3
1   2       3   4   5


NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT   IS LIN  SAT  AT   4
DEFAULT ECLEVEL IS LIMITED
```

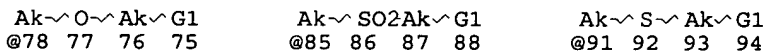
ECOUNT IS M3-X7 C AT 4

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 5

STEREO ATTRIBUTES: NONE
L8 (29911) SEA FILE=REGISTRY SSS FUL L7 NOT L6
L9 STR



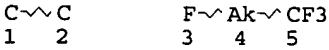
Page 1-A



Page 2-A
VAR G1=4/5
VAR G2=57/72/114/126/120/124/128/130/135/136/1/26/50/33/66/78/85/91
NODE ATTRIBUTES:
CONNECT IS E1 RC AT 11
CONNECT IS E1 RC AT 40
CONNECT IS E1 RC AT 60
CONNECT IS E2 RC AT 92
CONNECT IS E2 RC AT 119
CONNECT IS E1 RC AT 122
CONNECT IS E1 RC AT 133
CONNECT IS E2 RC AT 134
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 70

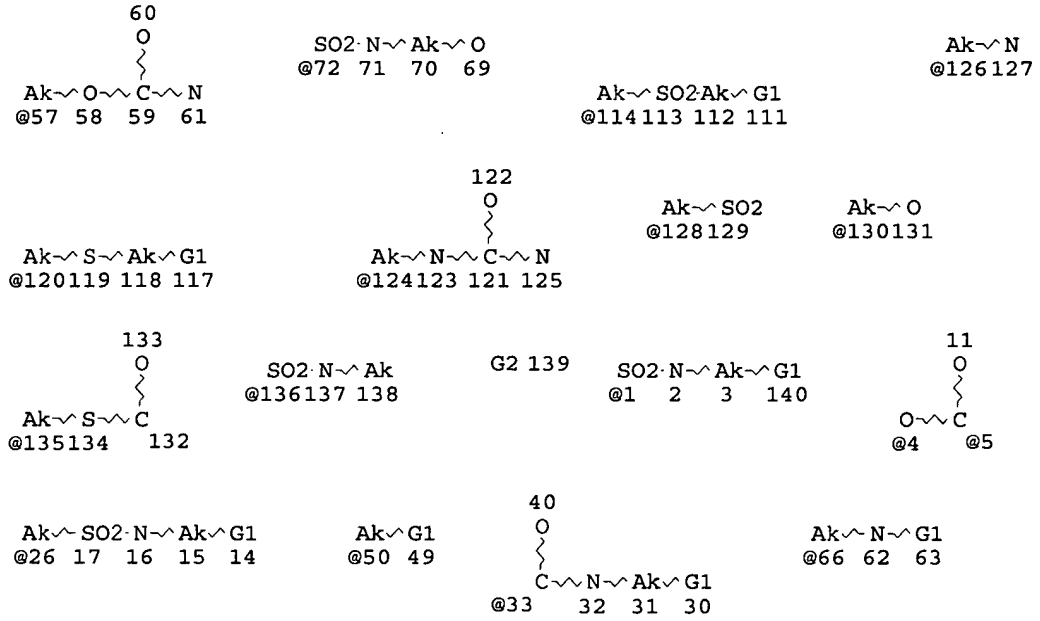
STEREO ATTRIBUTES: NONE
L10 26835 SEA FILE=REGISTRY SUB=L8 SSS FUL L9
L11 SCR 1918 OR 1838
L12 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT IS LIN SAT AT 4
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS M3-X7 C AT 4

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 5

STEREO ATTRIBUTES: NONE
L13 (29911)SEA FILE=REGISTRY SSS FUL L12 NOT L11
L14 STR



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Ak~O~Ak~G1
@78 77 76 75

Ak~SO2Ak~G1
@85 86 87 88

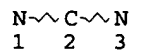
Ak~S~Ak~G1
@91 92 93 94

Page 2-A
VAR G1=4/5
VAR G2=57/72/114/126/120/124/128/130/135/136/1/26/50/33/66/78/85/91
NODE ATTRIBUTES:
CONNECT IS E1 RC AT 11
CONNECT IS E1 RC AT 40
CONNECT IS E1 RC AT 60
CONNECT IS E2 RC AT 92
CONNECT IS E2 RC AT 119
CONNECT IS E1 RC AT 122
CONNECT IS E1 RC AT 133
CONNECT IS E2 RC AT 134
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 70

STEREO ATTRIBUTES: NONE
L15 (26835)SEA FILE=REGISTRY SUB=L13 SSS FUL L14

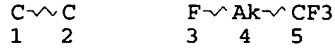
L16 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 3

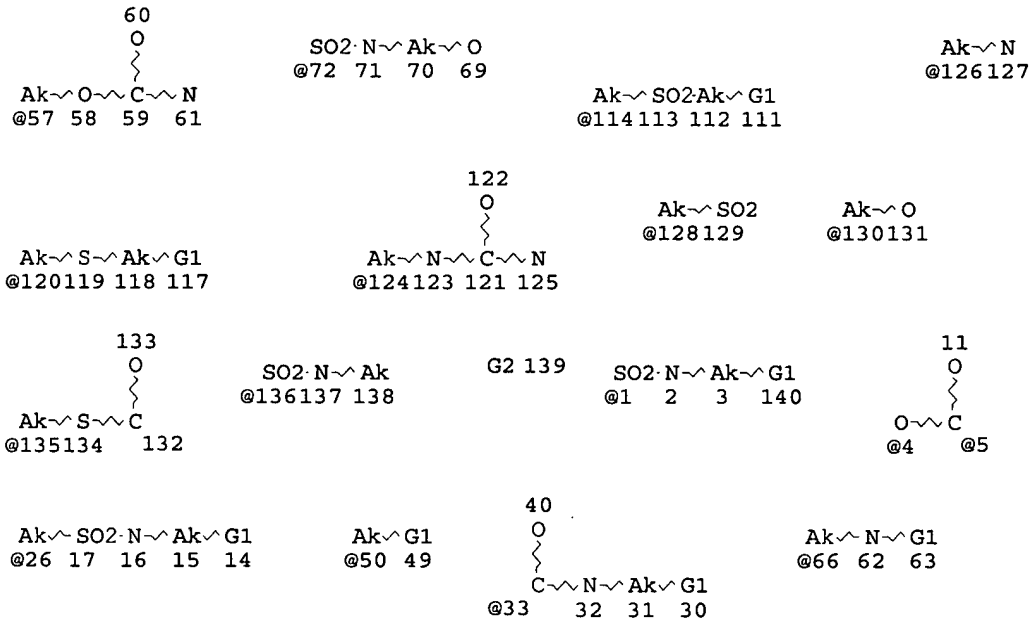
STEREO ATTRIBUTES: NONE
L17 715 SEA FILE=REGISTRY SUB=L15 SSS FUL L16
L18 SCR 1918 OR 1838
L19 STR



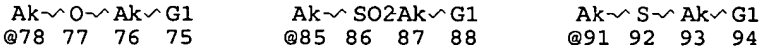
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT IS LIN SAT AT 4
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS M3-X7 C AT 4

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 5

STEREO ATTRIBUTES: NONE
L20 (29911)SEA FILE=REGISTRY SSS FUL L19 NOT L18
L21 STR



Page 1-A

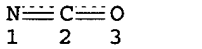


Page 2-A

VAR G1=4/5
VAR G2=57/72/114/126/120/124/128/130/135/136/1/26/50/33/66/78/85/91
NODE ATTRIBUTES:
CONNECT IS E1 RC AT 11
CONNECT IS E1 RC AT 40
CONNECT IS E1 RC AT 60
CONNECT IS E2 RC AT 92
CONNECT IS E2 RC AT 119
CONNECT IS E1 RC AT 122
CONNECT IS E1 RC AT 133
CONNECT IS E2 RC AT 134
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 70

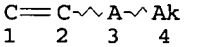
STEREO ATTRIBUTES: NONE
L22 (26835) SEA FILE=REGISTRY SUB=L20 SSS FUL L21
L23 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 3

STEREO ATTRIBUTES: NONE
L24 4147 SEA FILE=REGISTRY SUB=L22 SSS FUL L23
L26 2 SEA FILE=REGISTRY ABB=ON PLU=ON L10 AND L2
L34 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS M12-X100 C AT 4

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 4

STEREO ATTRIBUTES: NONE
L36 174 SEA FILE=REGISTRY SUB=L10 SSS FUL L34
L37 20 SEA FILE=REGISTRY ABB=ON PLU=ON L36 AND 2/NC
L38 1024 SEA FILE=REGISTRY ABB=ON PLU=ON ?URETHAN?/CNS
L39 1028 SEA FILE=REGISTRY ABB=ON PLU=ON ?UREYL?/CNS
L40 53690 SEA FILE=REGISTRY ABB=ON PLU=ON ?GUANIDIN?/CNS
L41 674 SEA FILE=REGISTRY ABB=ON PLU=ON ?CARBODIIMID?/CNS
L43 5 SEA FILE=REGISTRY ABB=ON PLU=ON L5 AND (L38 OR L39 OR L40 OR L41)
L45 1 SEA FILE=REGISTRY ABB=ON PLU=ON 104559-01-5/RN
L46 1 SEA FILE=REGISTRY ABB=ON PLU=ON 852161-27-4/RN
L47 1 SEA FILE=REGISTRY ABB=ON PLU=ON 112-92-5/RN
L48 1 SEA FILE=REGISTRY ABB=ON PLU=ON 53200-31-0/RN
L49 1 SEA FILE=REGISTRY ABB=ON PLU=ON 306997-46-6/RN
L50 1 SEA FILE=REGISTRY ABB=ON PLU=ON 112-96-9/RN
L54 23393 SEA FILE=HCAPLUS ABB=ON PLU=ON L5

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L55           5 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L26
L56       18293 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L10
L57         238 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L17
L58        1833 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L24
L59         413 SEA FILE=REGISTRY ABB=ON  PLU=ON  L17 AND L24
L60         121 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L59
L61         165 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L45/D OR L45/DP
L62           1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L46/D OR L46/DP
L63         509 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L47/D OR L47/DP
L64          77 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L48/D OR L48/DP
L65           5 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L49/D OR L49/DP
L66         299 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L50/D OR L50/DP
L67          90 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L36
L68         140 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L57 AND L58
L70          14 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L37
L71           3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L43
L73          64 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L54 AND ((L61 OR L62
                 OR L63 OR L64 OR L65 OR L66))
L74       56395 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L38
L75        3185 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L39
L76      144447 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L40
L77       10203 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L41
L78         387 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L54 AND ((L74 OR L75
                 OR L76 OR L77) OR ?UREYLEN? OR ?URETHANYLBIURETYL? OR
                 ?URETHAN?(A)?BIURIETYL? OR ?GUANIDIN? OR ?CARBODIIMID?)

L80      113402 SEA FILE=HCAPLUS ABB=ON  PLU=ON  FIBER?/SC,SX
L82           3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L67 AND ((L74 OR L75
                 OR L76 OR L77) OR ?UREYLEN? OR ?URETHANYLBIURETYL? OR
                 ?URETHAN?(A)?BIURIETYL? OR ?GUANIDIN? OR ?CARBODIIMID?)

L85           8 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L80 AND L57
L86         140 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L60 OR L68
L87           8 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L86 AND L80
L88      270766 SEA FILE=HCAPLUS ABB=ON  PLU=ON  COAT?/SC,SX
L89           5 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L86 AND L88
L92        7724 SEA FILE=HCAPLUS ABB=ON  PLU=ON  COATINGS/CT
L93      125107 SEA FILE=HCAPLUS ABB=ON  PLU=ON  COATING PROCESS/CT
L94      271789 SEA FILE=HCAPLUS ABB=ON  PLU=ON  COATING MATERIALS/CT
L95        2026 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L56 AND ((L92 OR L93
                 OR L94))
L96       21863 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ANTISOIL? OR (ANTI OR
                 REPEL? OR PREVENT? STOP?)(A)(SOIL? OR DIRT? OR DUST?
                 OR WATER? OR OIL?)
L97        1931 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L96 AND L56
L98         707 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L95 AND L97
L103     301171 SEA FILE=HCAPLUS ABB=ON  PLU=ON  TEXTIL?/SC,SX
L105          1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L67 AND L88 AND (L103
                 OR L80)
L106            QUE  ABB=ON  PLU=ON  FABRIC? OR TEXTILE? OR CLOTH? OR G
                 ARMENT? OR NAPER OR DRAPER OR WEAV? OR WOVE? OR WEFT? O
                 R WEB? OR SPIN? OR SPUN? OR FIBER? OR FIBRE# OR NET OR
                 NETTING?
L107        147 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L106 AND L98
L108          5 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L78 AND L107
L109          5 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L73 AND L107
L110          1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L67 AND L107
L114         46 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L55 OR L70 OR L71 OR
                 L82 OR L85 OR L87 OR L89 OR L105 OR (L108 OR L109 OR
                 L110)


=> d l114 1-46 ibib abs hitstr hitind

L114 ANSWER 1 OF 46  HCAPLUS  COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:        2005:735130  HCAPLUS
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DOCUMENT NUMBER: 143:195199
TITLE: Treatment comprising water- and oil-repellent agent, treatment composition, and exhaust application to carpet
INVENTOR(S): Kubota, Kouji; Kanbara, Takahito; Usugaya, Mitsuhiro
PATENT ASSIGNEE(S): Daikin Industries, Ltd., Japan
SOURCE: U.S. Pat. Appl. Publ., 16 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005175811	A1	20050811	US 2004-772427	2004 0206

PRIORITY APPLN. INFO.: US 2004-772427 2004 0206

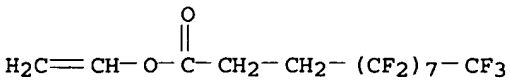
AB A textile having high F adhesion rate, and excellent H2O- and oil-repellency can be obtained by (1) preparing a treatment liquid comprising a H2O- and oil-repellent agent which comprises ≥1 F-containing compound selected from F-containing polymer or a F-containing low mol. weight compound, (2) adjusting pH of the treatment liquid to ≤7, (3) applying the treatment liquid to a textile, (4) treating the textile with steam, and (5) washing the textile with H2O and dehydrating the textile, where the treatment liquid comprises a water-soluble cationic polymer. CF3CF2(CF2CF2)nCH2CH2COOCH:CH2 (a mixture of compds.; average of n is 3.1) (150 g), 2-ethylhexyl acrylate (40 g), 3-chloro-2-hydroxypropyl methacrylate (2 g), n-lauryl mercaptan (1 g), polyoxyethylene lauryl ether (20 g), dialkyldimethylammonium chloride (10 g), tripropylene glycol (75 g) and ion exchanged water (480 g) were mixed, heated to 60°, homogenized by a high pressure homogenizer, the emulsified liquid was mixed with vinyl chloride monomer (70 g) having the purity of 99%, and 2,2'-azobis(2-amidinopropane) dihydrochloride (2 g), and copolymd. at 60° for 8 h. A carpet was treated with polyallylamine hydrochloride and this fluoropolymer.

IT **861822-42-6P 861822-43-7P 861822-44-8P**
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(water- and oil-repellent agent combination of water-soluble cationic polymer and fluoropolymer for treating carpet in an exhaust process)

RN 861822-42-6 HCAPLUS
CN Pentadecanoic acid, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,15-pentacosafluoro-, ethenyl ester, polymer with chloroethene, 3-chloro-2-hydroxypropyl 2-methyl-2-propenoate, ethenyl 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-heneicosafluorotridecanoate, ethenyl 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoroundecanoate and 2-ethylhexyl 2-propenoate (9CI) (CA INDEX NAME)

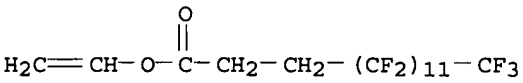
CM 1

CRN 73016-32-7
CMF C13 H7 F17 O2



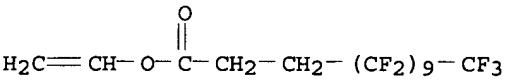
CM 2

CRN 73016-31-6
CMF C17 H7 F25 O2



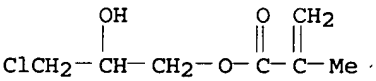
CM 3

CRN 73016-30-5
CMF C15 H7 F21 O2



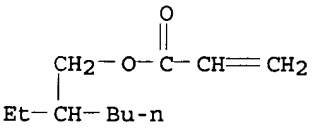
CM 4

CRN 13159-52-9
CMF C7 H11 Cl O3



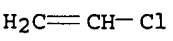
CM 5

CRN 103-11-7
CMF C11 H20 O2



CM 6

CRN 75-01-4
CMF C2 H3 Cl

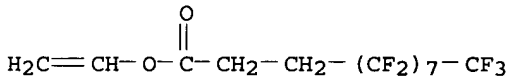


RN 861822-43-7 HCAPLUS

CN Pentadecanoic acid, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,15-pentacosafluoro-, ethenyl ester, polymer with chloroethene, 3-chloro-2-hydroxypropyl 2-methyl-2-propenoate, ethenyl 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-heneicosafluorotridecanoate, ethenyl 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoroundecanoate and octadecyl 2-propenoate (9CI) (CA INDEX NAME)

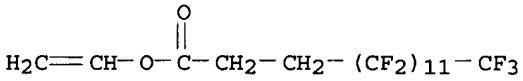
CM 1

CRN 73016-32-7
CMF C13 H7 F17 O2



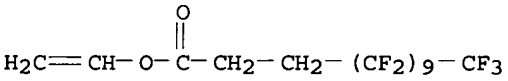
CM 2

CRN 73016-31-6
CMF C17 H7 F25 O2



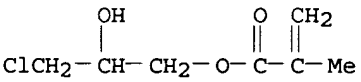
CM 3

CRN 73016-30-5
CMF C15 H7 F21 O2



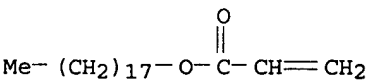
CM 4

CRN 13159-52-9
CMF C7 H11 Cl O3



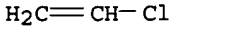
CM 5

CRN 4813-57-4
CMF C21 H40 O2



CM 6

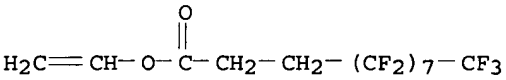
CRN 75-01-4
CMF C2 H3 Cl



RN 861822-44-8 HCAPLUS
CN Pentadecanoic acid, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,15-pentacosafluoro-, ethenyl ester, polymer with chloroethene, ethenyl 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-heneicosafluorotridecanoate and ethenyl 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoroundecanoate (9CI) (CA INDEX NAME)

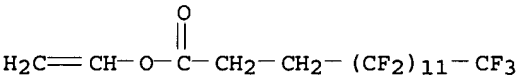
CM 1

CRN 73016-32-7
CMF C13 H7 F17 O2



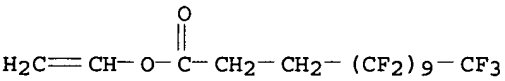
CM 2

CRN 73016-31-6
CMF C17 H7 F25 O2



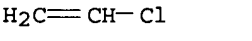
CM 3

CRN 73016-30-5
CMF C15 H7 F21 O2



CM 4

CRN 75-01-4
CMF C2 H3 Cl

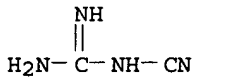


IT **26591-12-8**, Dicyandiamide-formaldehyde resin
RL: POF (Polymer in formulation); TEM (Technical or engineered

material use); USES (Uses)
(water- and oil-repellent agent combination of water-soluble cationic polymer and fluoropolymer for treating carpet in an exhaust process)
RN 26591-12-8 HCAPLUS
CN Guanidine, cyano-, polymer with formaldehyde (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 461-58-5
CMF C2 H4 N4



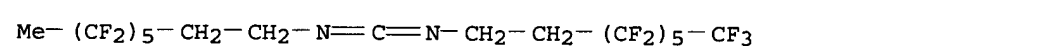
CM 2

CRN 50-00-0
CMF C H2 O

IC ICM B05D003-02
ICS B32B033-00
INCL 428096000; 427384000; 427377000; 428097000
CC 40-5 (Textiles and Fibers)
IT **861822-42-6P 861822-43-7P 861822-44-8P**
861822-45-9P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(water- and oil-repellent agent combination of water-soluble cationic polymer and fluoropolymer for treating carpet in an exhaust process)
IT 9002-98-6 9003-05-8D, Polyacrylamide, cationic 9003-08-1, Melamine-formaldehyde resin 9005-25-8D, Starch, cationic, uses 9011-05-6, Formaldehyde-urea copolymer **26591-12-8**, Dicyandiamide-formaldehyde resin 71550-12-4, Polyallylamine hydrochloride
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(water- and oil-repellent agent combination of water-soluble cationic polymer and fluoropolymer for treating carpet in an exhaust process)

L114 ANSWER 2 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:573248 HCAPLUS
DOCUMENT NUMBER: 143:172519
TITLE: N,N'-Bis(1H,1H,2H,2H-perfluorooctyl)carbodiimide
AUTHOR(S): Aizpurua, Jesus M.; Palomo, Claudio; Loinaz, Iraida
CORPORATE SOURCE: Departamento de Quimica Organic-I, Universidad del Pais Vasco, San Sebastian, 20018, Spain
SOURCE: Handbook of Fluorous Chemistry (2004), 457-459. Editor(s): Gladysz, John A.; Curran, Dennis P.; Horvath, Istvan T. Wiley-VCH Verlag GmbH & Co. KGaA: Weinheim, Germany. CODEN: 69GYXQ; ISBN: 3-527-30617-X

DOCUMENT TYPE: Conference
LANGUAGE: English
AB C6H13CH2CH2NH2, prepared in 88% yield from C6H13CH2CH2I, was acylated with triphosgene to give 91% (C6H13CH2CH2NH)2CO, which was treated with Ph3PBr2 and Et3N in C6H14 to give 99% title compound
IT **860804-24-6P**, N,N'-Bis(1H,1H,2H,2H-perfluorooctyl)carbodiimide
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation from 1H,1H,2H,2H-perfluorooctyl iodide)
RN 860804-24-6 HCAPLUS
CN 1-Octanamine, N-[(3,3,4,4,5,5,6,6,7,7-decafluorooctyl)carbonimidoyl]-3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro- (9CI) (CA INDEX NAME)



CC 23-4 (Aliphatic Compounds)
IT **860804-24-6P**, N,N'-Bis(1H,1H,2H,2H-perfluorooctyl)carbodiimide
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation from 1H,1H,2H,2H-perfluorooctyl iodide)
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L114 ANSWER 3 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:570956 HCAPLUS
DOCUMENT NUMBER: 143:99012
TITLE: Water-repellent coating film having low refractive index
INVENTOR(S): Motoyama, Kenichi; Tani, Yoshihiro
PATENT ASSIGNEE(S): Nissan Chemical Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005059050	A1	20050630	WO 2004-JP18921	2004 1217

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: JP 2003-421057 A 2003 1218

AB A coating film having a refractive index of 1.28-1.41 and a water contact angle of 90-115° is formed by preparing a reaction

mixture containing Si(OR)4 (R = C1-5 alkyl), CF3(CF2)nCH2CH2Si(OR1)3 (R1 = C1-5 alkyl; n = 0-12), H2NCONH(CH2)mSi(OR2)3 (R2 = C1-5 alkyl; m = 1-5), an alc. R3CH2OH [R3 = H, (un)substituted C1-12 alkyl], and oxalic acid at a specific ratio; forming a solution of a polysiloxane by heating the reaction mixture at 40-180° in the absence of water; applying a coating liquid containing the solution to the surface of a base; and heat curing the coating film at 40-450° to closely adhere the coating film to the base surface. The coating is useful for forming a scratch- and soiling-resistant antireflective film on a glass substrate.

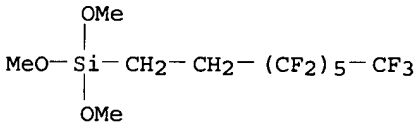
IT **856215-25-3**, Tetraethoxysilane-3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyltrimethoxysilane-γ-ureidopropyltriethoxysilane copolymer
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(water-repellent coating film having low refractive index and high hardness)

RN 856215-25-3 HCAPLUS

CN Silicic acid (H4SiO4), tetraethyl ester, polymer with [3-(triethoxysilyl)propyl]urea and trimethoxy(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)silane (9CI) (CA INDEX NAME)

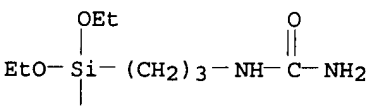
CM 1

CRN 85857-16-5
CMF C11 H13 F13 O3 Si



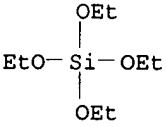
CM 2

CRN 23779-32-0
CMF C10 H24 N2 O4 Si



CM 3

CRN 78-10-4
CMF C8 H20 O4 Si



IC ICM C09D183-04
ICS C09D005-16

CC 42-10 (**Coatings**, Inks, and Related Products)

IT **856215-25-3**, Tetraethoxysilane-3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyltrimethoxysilane-γ-ureidopropyltriethoxysilane copolymer 856215-26-4, γ-Aminopropyltriethoxysilane-γ-glycidoxypropyltrimethoxysilane-tetraethoxysilane-3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyltrimethoxysilane-γ-ureidopropyltriethoxysilane copolymer
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(water-repellent coating film having low refractive index and high hardness)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L114 ANSWER 4 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:564725 HCAPLUS
DOCUMENT NUMBER: 143:79779
TITLE: Coating film having low refractive index and large water contact angle
INVENTOR(S): Tani, Yoshihiro; Motoyama, Kenichi
PATENT ASSIGNEE(S): Nissan Chemical Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005059051	A1	20050630	WO 2004-JP18922	2004 1217

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: JP 2003-421828 A 2003 1219

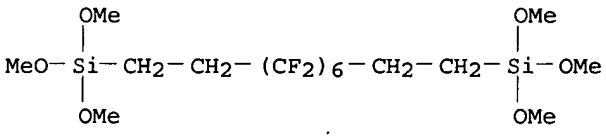
AB The coating film, having a refractive index of 1.28-1.38 and a water contact angle of 90-115°, is formed by preparing a solution of a polysiloxane by heating a reaction mixture containing Si(OR)4 (R = C1-5 alkyl), (R1O)3SiCH2CH2(CF2)nCH2CH2Si(OR1)3 (R1 = C1-5 alkyl; n = 1-13), an alc. R2CH2OH [R2 = H, (un)substituted C1-12 alkyl], and oxalic acid at a specific ratio at 50-180° in the absence of water; applying a coating liquid containing the solution to the surface of a base; and curing coating film by heating at 80-450° to closely adhere the coating film to the base surface. The coating is useful for forming a scratch- and soiling-resistant antireflective film on a glass substrate.

IT **856009-44-4**
RL: TEM (Technical or engineered material use); USES (Uses)
(coating film having low refractive index and large water contact angle)

RN 856009-44-4 HCAPLUS
CN Silicic acid (H4SiO4), tetraethyl ester, polymer with 6,6,7,7,8,8,9,9,10,10,11,11-dodecafluoro-3,3,14,14-tetramethoxy-2,15-dioxa-3,14-disilahexadecane, [3-(triethoxysilyl)propyl]urea and trimethoxy(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)silane (9CI) (CA INDEX NAME)

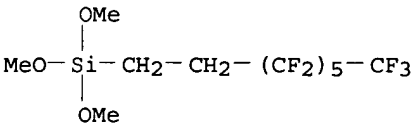
CM 1

CRN 94403-04-0
CMF C16 H26 F12 O6 Si



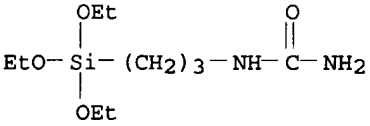
CM 2

CRN 85857-16-5
CMF C11 H13 F13 O3 Si



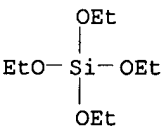
CM 3

CRN 23779-32-0
CMF C10 H24 N2 O4 Si



CM 4

CRN 78-10-4
CMF C8 H20 O4 Si



IC ICM C09D183-10
ICS C09D005-16
CC 42-10 (**Coatings**, Inks, and Related Products)
IT 64-17-5, Ethanol, uses 67-56-1, Methanol, uses 404575-06-0

856009-42-2 856009-43-3 **856009-44-4**
RL: TEM (Technical or engineered material use); USES (Uses)
(coating film having low refractive index and large water contact angle)
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L114 ANSWER 5 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:453824 HCAPLUS
DOCUMENT NUMBER: 142:483562
TITLE: Fluorochemical oligomeric compositions with good **antisoiling** for fibrous substrates
INVENTOR(S): Jariwala, Chetan P.; Coppens, Dirk M.; Godefroidt, Frank A. H. M.
PATENT ASSIGNEE(S): 3M Innovative Properties Company, USA
SOURCE: U.S. Pat. Appl. Publ., 17 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005113508	A1	20050526	US 2003-723510	2003 1126
WO 2005054567	A1	20050616	WO 2004-US35723	2004 1028

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2003-723510 A 2003 1126

AB Title compns. comprising a fluorochem. oligomeric component and an **antisoiling** component desirable **antisoiling** properties, as well as oil, water and stain repellency to fibrous substrates. Thus, 411.0 g 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl acrylate and 19.5 g 2-mercaptoethanol were reacted in the presence of V 59 (2,2'-azobis[2-methyl-butanenitrile]) at 65° for 15 h, 0.0820 mol of the resulting compound was reacted with 0.082 mol octadecylisocyanate at 85° for 17 h, mixed with sodium dodecylbenzenesulfonate to give an emulsion with solid content 30%, which was sprayed on a carpet and dried at 120°, showing good water and **oil repellency** and **antisoiling** property.

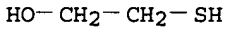
IT **104559-01-5DP**, Desmodur N 3300, reaction products with isocyanates and perfluorooligomers having hydroxy groups
852161-27-4DP, reaction products with isocyanates and alcs.
RL: IMF (Industrial manufacture); POF (Polymer in formulation);

TEM (Technical or engineered material use); PREP (Preparation);
USES (Uses)
(blend with acrylic polymer; fluorochem. oligomeric compns.
with good **antisoiling** for fibrous substrates)
RN 104559-01-5 HCAPLUS
CN Desmodur N 3300 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 852161-27-4 HCAPLUS
CN 2-Propenoic acid, 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl ester, telomer with 2-mercaptoethanol and octadecyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 60-24-2
CMF C2 H6 O S

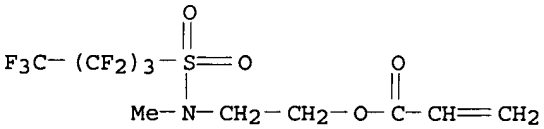


CM 2

CRN 425664-29-5
CMF (C21 H40 O2 . C10 H10 F9 N O4 S)x
CCI PMS

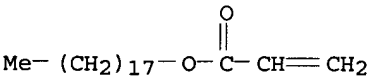
CM 3

CRN 67584-55-8
CMF C10 H10 F9 N O4 S

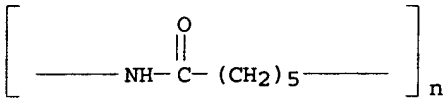


CM 4

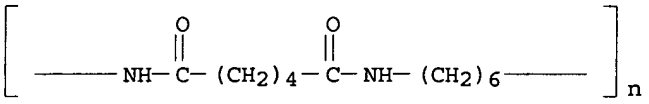
CRN 4813-57-4
CMF C21 H40 O2



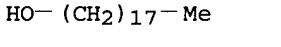
IT **25038-54-4**, Polyamide 6, uses **32131-17-2**, Polyamide 66, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(**fiber**, substrate; fluorochem. oligomeric compns.
with good **antisoiling** for fibrous substrates)
RN 25038-54-4 HCAPLUS
CN Poly[imino(1-oxo-1,6-hexanediyl)] (9CI) (CA INDEX NAME)



RN 32131-17-2 HCAPLUS
CN Poly[imino(1,6-dioxo-1,6-hexanediyl)imino-1,6-hexanediyl] (9CI) (CA INDEX NAME)



IT **112-92-5DP**, Stearyl alcohol, reaction products with isocyanates and perfluorooligomers having hydroxy groups
53200-31-0DP, Desmodur N 100, reaction products with perfluorooligomers having hydroxy groups and alcs.
306997-46-6DP, reaction products with isocyanates and alcs.
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(oligomer, blend with acrylic polymer; fluorochem. oligomeric compns. with good **antisoiling** for fibrous substrates)
RN 112-92-5 HCAPLUS
CN 1-Octadecanol (8CI, 9CI) (CA INDEX NAME)

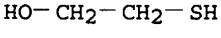


RN 53200-31-0 HCAPLUS
CN Desmodur N 100 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 306997-46-6 HCAPLUS
CN 2-Propenoic acid, 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl ester, telomer with 2-mercaptoethanol (9CI) (CA INDEX NAME)

CM 1

CRN 60-24-2
CMF C2 H6 O S

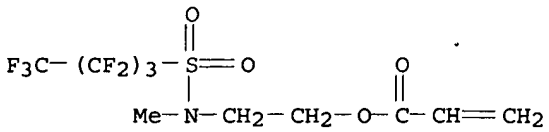


CM 2

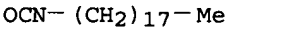
CRN 306997-45-5
CMF (C10 H10 F9 N O4 S)x
CCI PMS

CM 3

CRN 67584-55-8
CMF C10 H10 F9 N O4 S



IT **112-96-9DP**, Octadecylisocyanate, reaction products with perfluorooligomers having hydroxy groups
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(optionally blend with acrylic polymer; fluorochem. oligomeric compns. with good **antisoiling** for fibrous substrates)
RN 112-96-9 HCAPLUS
CN Octadecane, 1-isocyanato- (9CI) (CA INDEX NAME)



IC ICM C08K003-00
INCL 524556000; 524555000
CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 40
ST fluorochem oligomeric compn **antisoiling** fibrous substrate; methylnonafluorobutylsulfonylaminoethyl acrylate mercaptoethanol telomer octadecylisocyanate carbamate compn carpet treatment
IT Polyamide **fibers**, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(6, Zeftron, substrates; fluorochem. oligomeric compns. with good **antisoiling** for fibrous substrates)
IT Polyamide **fibers**, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(66, substrates; fluorochem. oligomeric compns. with good **antisoiling** for fibrous substrates)
IT Fluoropolymers, uses
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic, blend with acrylic polymers; fluorochem. oligomeric compns. with good **antisoiling** for fibrous substrates)
IT Acrylic polymers, uses
Aminoplasts
Silsesquioxanes
RL: TEM (Technical or engineered material use); USES (Uses)
(**antisoiling** agents; fluorochem. oligomeric compns. with good **antisoiling** for fibrous substrates)
IT **Coating materials**
(**antisoiling**, water-resistant; fluorochem. oligomeric compns. with good **antisoiling** for fibrous substrates)
IT Acrylic polymers, uses
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(fluoroalkyl group-containing, blend with acrylic polymers; fluorochem. oligomeric compns. with good **antisoiling** for fibrous substrates)
IT Polyamides, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(fluorochem. oligomeric compns. with good **antisoiling** for fibrous substrates)
IT **Coating materials**
(oil-resistant, **antisoiling**-; fluorochem. oligomeric compns. with good **antisoiling** for fibrous substrates)

IT Fluoropolymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(oligomers; fluorochem. oligomeric compns. with good **antisoiling** for fibrous substrates)
IT Carpets
Fibrous materials
Wool
(substrates; fluorochem. oligomeric compns. with good **antisoiling** for fibrous substrates)
IT Polypropene **fibers**, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(substrates; fluorochem. oligomeric compns. with good **antisoiling** for fibrous substrates)
IT Polymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(water-soluble, **antisoiling** agents; fluorochem. oligomeric compns. with good **antisoiling** for fibrous substrates)
IT 25685-29-4P, Ethyl methacrylate-methyl methacrylate copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**antisoiling** agent, blend with fluorooligomer; fluorochem. oligomeric compns. with good **antisoiling** for fibrous substrates)
IT **104559-01-5DP**, Desmodur N 3300, reaction products with isocyanates and perfluorooligomers having hydroxy groups
852161-27-4DP, reaction products with isocyanates and alcs.
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(blend with acrylic polymer; fluorochem. oligomeric compns. with good **antisoiling** for fibrous substrates)
IT 1344-28-1, Alumina, uses 7631-86-9, Silica, uses 9003-39-8, Polyvinyl pyrrolidone
RL: TEM (Technical or engineered material use); USES (Uses)
(colloidal, **antisoiling** agent; fluorochem. oligomeric compns. with good **antisoiling** for fibrous substrates)
IT **25038-54-4**, Polyamide 6, uses 25085-53-4, Isotactic polypropylene **32131-17-2**, Polyamide 66, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(**fiber**, substrate; fluorochem. oligomeric compns. with good **antisoiling** for fibrous substrates)
IT **112-92-5DP**, Stearyl alcohol, reaction products with isocyanates and perfluorooligomers having hydroxy groups
53200-31-0DP, Desmodur N 100, reaction products with perfluorooligomers having hydroxy groups and alcs.
306997-46-6DP, reaction products with isocyanates and alcs.
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(oligomer, blend with acrylic polymer; fluorochem. oligomeric compns. with good **antisoiling** for fibrous substrates)
IT **112-96-9DP**, Octadecylisocyanate, reaction products with perfluorooligomers having hydroxy groups
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(optionally blend with acrylic polymer; fluorochem. oligomeric compns. with good **antisoiling** for fibrous substrates)

L114 ANSWER 6 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:120819 HCAPLUS
DOCUMENT NUMBER: 140:165096
TITLE: Fluorinated urethane compounds and

compositions containing the same
INVENTOR(S): Yamamoto, Ikuo; Kusumi, Kayo; Yoshioka, Takuya; Yamaguchi, Fumihiko
PATENT ASSIGNEE(S): Daikin Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 25 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004013089	A1	20040212	WO 2003-JP9903	20030805
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2493985	AA	20040212	CA 2003-2493985	20030805
EP 1548001	A1	20050629	EP 2003-766731	20030805
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				

PRIORITY APPLN. INFO.:		
JP 2002-228795	A	20020806
WO 2003-JP9903	W	20030805

AB Fluorinated urethane compds. [RfA1(X1(OH))(Y1)a-OC(:O)NH]mI[NHC(:O)OY2]n[NHC(:O)O((ClCH2)X2O)bR1]k can impart high water- and oil-repellency, wherein I = a group derived from a polyisocyanate compound by removing the isocyanato groups; Rf = C2-21 perfluoroalkyl; A1 = a direct bond or C1-21 divalent organic group; X1, X2 = C2-5 trivalent, linear or branched aliphatic group; Y1 = a divalent organic group containing C0-5, N0-2, and ≥1 hydrogen atom (≥1 carbon atom or ≥1 nitrogen atom must be present); Y2 = a monovalent organic group which may have a hydroxyl group; and R1 = H or C1-10 alkyl. Thus, 20.1 g 3-perfluorooctyl-1,2-propanediol obtained from 3-perfluorooctyl-1,2-epoxypropane and 7.79 g Sumidur N 3300 were reacted to give 25.3 g hydroxy-containing perfluotooctylpropyl substituted hexamethylene diisocyanate isocyanurate, 5 g of which was emulsified in the presence of polyethylene glycol alkyl ether and sodium α-olefinsulfonate, applied on a carpet and heat-cured to give a test piece showing good water and oil repellency and anticontamination.

IT **653600-20-5P**
RL: IMF (Industrial manufacture); POF (Polymer in formulation);

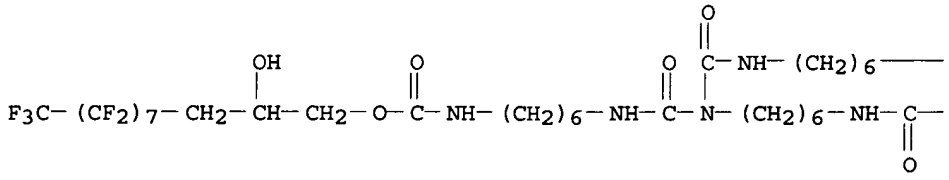
PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation of fluorinated urethane compds. for compns.)

RN 653600-20-5 HCAPLUS
CN 2,9,11,13,20-Pentaazaheneicosanedioic acid, 11-[6-[[[(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoro-2-hydroxyundecyl)oxy]carbonyl]amino]hexyl]-10,12-dioxo-, bis(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoro-2-hydroxyundecyl) ester, homopolymer (9CI) (CA INDEX NAME)

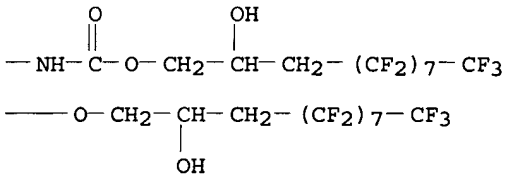
CM 1

CRN 653600-19-2
CMF C56 H59 F51 N6 O11

PAGE 1-A



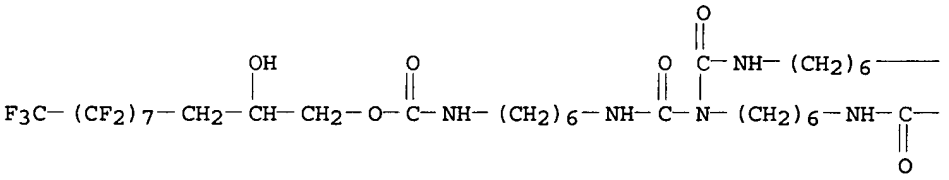
PAGE 1-B



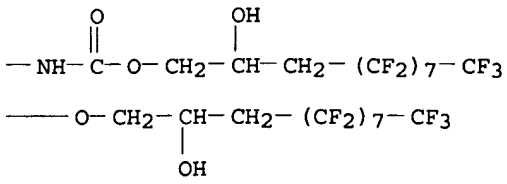
IT **653600-19-2P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(preparation of fluorinated urethane compds. for compns.)

RN 653600-19-2 HCAPLUS
CN 2,9,11,13,20-Pentaazaheneicosanedioic acid, 11-[6-[[[(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoro-2-hydroxyundecyl)oxy]carbonyl]amino]hexyl]-10,12-dioxo-, bis(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoro-2-hydroxyundecyl) ester (9CI) (CA INDEX NAME)

PAGE 1-A



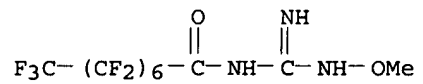
PAGE 1-B



IC ICM C07C275-62
ICS C09K003-00; C09K003-18; C07D251-34; D06M015-576
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): **40**
IT **653600-20-5P**
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation of fluorinated urethane compds. for compns.)
IT 653600-17-0P **653600-19-2P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(preparation of fluorinated urethane compds. for compns.)

L114 ANSWER 7 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:75007 HCAPLUS
DOCUMENT NUMBER: 141:225411
TITLE: Fluorinated heterocyclic compounds: an assay on the photochemistry of some fluorinated 1-oxa-2-azoles: an expedient route to fluorinated heterocycles
AUTHOR(S): Buscemi, Silvestre; Pace, Andrea; Pibiri, Ivana; Vivona, Nicolo; Caronna, Tullio
CORPORATE SOURCE: Dipartimento di Chimica Organica "E. Paterno", Universita degli Studi di Palermo, Palermo, I-90128, Italy
SOURCE: Journal of Fluorine Chemistry (2004), 125(2), 165-173
CODEN: JFLCAR; ISSN: 0022-1139
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 141:225411
AB Photoinduced heterocyclic rearrangements of O-N bond-containing azoles are claimed in the synthesis of target fluorinated heterocyclic compds. In this context, the photochem. behavior of some fluorinated 1,2,4-oxadiazoles was studied. Irradiations of 3-amino-5-perfluoroalkyl-1,2,4-oxadiazoles at λ = 313 nm in MeOH gave open-chain products arising from a reaction of the nucleophilic solvent with either the 1st formed ring-photolytic species or with a nitrilimine moiety generated from it. Differently, irradiations in MeOH with the presence of NEt3 (TEA) followed competing phototransposition pathways leading to the ring-isomers 2-amino-5-perfluoroalkyl-1,3,4-oxadiazoles (major component) and the ring degenerate isomers 5-amino-3-perfluoroalkyl-1,2,4-oxadiazoles (minor component). However, 3-amino-5-polyfluorophenyl-1,2,4-oxadiazoles underwent ring-photoisomerization into 1,3,4-oxadiazoles when irradiations were carried out at λ = 254 nm. In turn, the irradiation of the 3-phenyl-5-perfluoroheptyl-1,2,4-oxadiazole at λ = 254 nm in MeOH gave the solvolysis product, but no ring-isomerization was observed Some mechanistic considerations are reported, and some applications in the synthesis of target fluorinated 1,3,4-oxadiazoles are claimed.
IT **748813-45-8P**, N-Perfluorooctanoyl-O-methyl-N'-

hydroxyguanidine
RL: SPN (Synthetic preparation); PREP (Preparation)
(photochem. of fluorinated 1,2,4-oxadiazoles including methanolysis and ring rearrangement)
RN 748813-45-8 HCAPLUS
CN Octanamide, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-N-[imino(methoxyamino)methyl]- (9CI) (CA INDEX NAME)



CC 28-10 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 74
IT 361448-20-6P, [5-(2,3,5,6-Tetrafluoro-4-methoxyphenyl)-1,2,4-oxadiazol-3-yl]amine 500129-59-9P, [3-(Pentadecafluoroheptyl)-1,2,4-oxadiazol-5-yl]amine 748813-44-7P, N-Pentadecafluorooctanoyl-N'-methoxybenzenecarboximidamide **748813-45-8P**, N-Perfluorooctanoyl-O-methyl-N'-hydroxyguanidine 748813-46-9P, N-Perfluorobutanoyl-O-methyl-N'-hydroxyguanidine 748813-47-0P 748813-48-1P 748813-49-2P, [5-(Heptafluoropropyl)-1,3,4-oxadiazol-2-yl]amine 748813-50-5P, [3-(Heptafluoropropyl)-1,2,4-oxadiazol-5-yl]amine 748813-51-6P, [5-(2,3,4,5-Tetrafluorophenyl)-1,3,4-oxadiazol-2-yl]amine 748813-52-7P, [5-(Pentafluorophenyl)-1,3,4-oxadiazol-2-yl]amine 748813-53-8P, [5-(2,3,5-Trifluoro-4-methoxyphenyl)-1,2,4-oxadiazol-3-yl]amine
RL: SPN (Synthetic preparation); PREP (Preparation)
(photochem. of fluorinated 1,2,4-oxadiazoles including methanolysis and ring rearrangement)
REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L114 ANSWER 8 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:951257 HCAPLUS
DOCUMENT NUMBER: 140:6144
TITLE: **Antisoiling oil-repellent water-repellent** fluorochemical compositions for treatment of fibrous substrates
INVENTOR(S): Audenaert, Frans A.; Dams, Rudolf J.; Buckanin, Richard S.; Flynn, Richard M.; Vitcak, Daniel R.; Elsbernd, Cheryl L. S.; Jariwala, Chetan P.; McAlister, E. Steven; Vander Elst, Pierre J.
PATENT ASSIGNEE(S): 3M Innovative Properties Company, USA
SOURCE: PCT Int. Appl., 66 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003100158	A1	20031204	WO 2003-US16341	2003 0523

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,

MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC,
SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ,
VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ,
DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL,
PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG

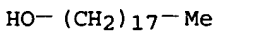
CA 2493857	AA	20031204	CA 2003-2493857	2003 0523
AU 2003239603	A1	20031212	AU 2003-239603	2003 0523
US 2004077238	A1	20040422	US 2003-444713	2003 0523
EP 1507917	A1	20050223	EP 2003-734154	2003 0523
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003011249	A	20050315	BR 2003-11249	2003 0523
JP 2005527674	T2	20050915	JP 2004-507594	2003 0523
PRIORITY APPLN. INFO.:			US 2002-383392P P	2002 0524
			WO 2003-US16341 W	2003 0523

AB Fluorochem. composition consists of a dispersion or a solution of a fluorinated compound obtained from reaction products of (I) a fluorinated polyether according to the formula: Rf-Q-Tk (I) wherein Rf represents a monovalent perfluorinated polyether group having a mol. weight of at least 750 g/mol, Q represents a chemical bond or a divalent or trivalent organic linking group, T represents a functional group capable of reacting with an isocyanate and k is 1 or 2, (II) an isocyanate component selected from a polyisocyanate compound that has at least 3 isocyanate groups or a mixture of polyisocyanate compds. wherein the average number of isocyanate groups per mol. is more than 2, and (III) optionally one or more co-reactants capable of reacting with an isocyanate group. Thus, polyester-cotton **fabrics** (e.g., carpet) were coating with a composition containing 2-butanone oxime-blocked reaction products of Voranate M 220 and poly(hexafluoropropylene oxide) heptafluoropropyl 1-((2-hydroxyethyl)aminocarbonyl) tetrafluoroethyl ether.

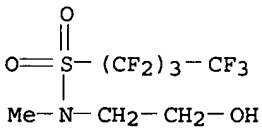
IT **112-92-5DP**, Stearyl alcohol, reaction products with fluorinated compound and isocyanates **34454-97-2DP**, reaction products with fluorinated compound and isocyanates **34455-00-0DP**, reaction products with fluorinated compound and isocyanates **53200-31-0DP**, Desmodur N 100, reaction products with fluorinated compound **67584-55-8DP**, reaction products with fluorinated compound and isocyanates **104559-01-5DP**, Desmodur N 3300, reaction products with fluorinated compound
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(production of **antisoiling oil-repellent water-repellent** fluorochem. compns. for treatment of fibrous substrates)

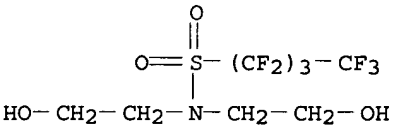
RN 112-92-5 HCAPLUS
CN 1-Octadecanol (8CI, 9CI) (CA INDEX NAME)



RN 34454-97-2 HCAPLUS
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-(2-hydroxyethyl)-N-methyl- (9CI) (CA INDEX NAME)

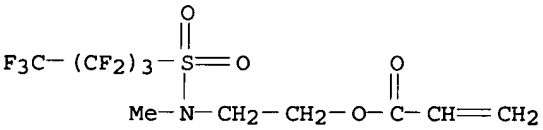


RN 34455-00-0 HCAPLUS
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N,N-bis(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



RN 53200-31-0 HCAPLUS
CN Desmodur N 100 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 67584-55-8 HCAPLUS
CN 2-Propenoic acid, 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl ester (9CI) (CA INDEX NAME)



RN 104559-01-5 HCAPLUS
CN Desmodur N 3300 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IC ICM D06M015-576
ICS C09D175-04; D06M015-53
CC 40-9 (Textiles and Fibers)
Section cross-reference(s): 42
ST **antisoiling oil repellent water** fluorochem compn treatment fibrous substrate
IT **Coating materials**
(**antisoiling**; production of **antisoiling oil-repellent water-repellent** fluorochem. compns. for treatment of fibrous substrates)
IT **Textiles**

(cotton-polyester; production of **antisoiling oil -repellent water-repellent** fluorochem. compns. for treatment of fibrous substrates)

IT **Coating materials**
(oil- and water-resistant; production of **antisoiling oil-repellent water-repellent** fluorochem. compns. for treatment of fibrous substrates)

IT Polyurethanes, uses
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyoxyalkylene-, fluorine-containing; production of **antisoiling oil-repellent water-repellent** fluorochem. compns. for treatment of fibrous substrates)

IT Fluoropolymers, uses
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyoxyalkylene-polyurethane-; production of **antisoiling oil-repellent water-repellent** fluorochem. compns. for treatment of fibrous substrates)

IT Polyoxyalkylenes, uses
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyurethane-, fluorine-containing; production of **antisoiling oil-repellent water-repellent** fluorochem. compns. for treatment of fibrous substrates)

IT Carpets
Oilproofing agents
Soilproofing agents
Waterproofing agents
(production of **antisoiling oil-repellent water-repellent** fluorochem. compns. for treatment of fibrous substrates)

IT 96-29-7, 2-Butanone oxime
RL: RCT (Reactant); RACT (Reactant or reagent)
(blocking agent; production of **antisoiling oil-repellent water-repellent** fluorochem. compns. for treatment of fibrous substrates)

IT 112-00-5, Arquad 12-50 28724-32-5, Ethoquad 18-25 54116-08-4, Sermul EA 266
RL: MOA (Modifier or additive use); USES (Uses)
(emulsifier; production of **antisoiling oil-repellent water-repellent** fluorochem. compns. for treatment of fibrous substrates)

IT **112-92-5DP**, Stearyl alcohol, reaction products with fluorinated compound and isocyanates 822-06-0DP, Hexamethylene diisocyanate, reaction products with fluorinated compound 3779-63-3DP, Tris(6-isocyanatohexyl)isocyanurate, reaction products with fluorinated compound 5124-30-1DP, Methylene bis(4-cyclohexyl isocyanate), reaction products with fluorinated compound 9016-87-9DP, Voranate M 220, reaction products with fluorinated compound and optionally glycerol monostearate 25119-62-4DP, Allyl alcohol-styrene copolymer, reaction products with fluorinated compound and isocyanates 31566-31-1DP, Glycerol monostearate, reaction products with fluorinated compound and isocyanates **34454-97-2DP**, reaction products with fluorinated compound and isocyanates **34455-00-0DP**, reaction products with fluorinated compound and isocyanates **53200-31-0DP**, Desmodur N 100, reaction products with fluorinated compound **67584-55-8DP**, reaction products with

fluorinated compound and isocyanates 79103-62-1DP, Desmodur W, reaction products with fluorinated compound **104559-01-5DP**, Desmodur N 3300, reaction products with fluorinated compound 118550-50-8DP, Tolonate HDT, reaction products with fluorinated compound 627909-42-6DP, Poly(hexafluoropropylene oxide) heptafluoropropyl 1-((2-hydroxyethyl)aminocarbonyl) tetrafluoroethyl ether, reaction products with isocyanates 627909-43-7DP, Poly(hexafluoropropylene oxide) heptafluoropropyl 1-((2,3-dihydroxypropyl) aminocarbonyl)tetrafluoroethyl ether, reaction products with isocyanates
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(production of **antisoiling oil-repellent water-repellent** fluorochem. compns. for treatment of fibrous substrates)

IT 98-08-8, α,α,α-Trifluorotoluene 219484-64-7, HFE 7100
RL: NUU (Other use, unclassified); USES (Uses)
(solvent; production of **antisoiling oil-repellent water-repellent** fluorochem. compns. for treatment of fibrous substrates)

IT 141-43-5, Ethanolamine, reactions 616-30-8, 3-Amino-1,2-propanediol 146185-22-0, Poly(hexafluoropropylene oxide) heptafluoropropyl 1-(methoxycarb onyl)tetrafluoroethyl ether
RL: RCT (Reactant); RACT (Reactant or reagent)
(starting materials; production of **antisoiling oil-repellent water-repellent** fluorochem. compns. for treatment of fibrous substrates)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L114 ANSWER 9 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:951256 HCAPLUS
DOCUMENT NUMBER: 140:6143
TITLE: **Antisoiling** oil- and water-resistant fluorochemical composition for treatment of fibrous substrate
INVENTOR(S): Cote, Linda G.; McAlister, E. Steven
PATENT ASSIGNEE(S): 3M Innovative Properties Company, USA
SOURCE: PCT Int. Appl., 77 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003100157	A1	20031204	WO 2003-US15088	20030513

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,

	GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2487067		AA	20031204	CA 2003-2487067
				2003
				0513
AU 2003234544		A1	20031212	AU 2003-234544
				2003
				0513
EP 1507916		A1	20050223	EP 2003-728884
				2003
				0513
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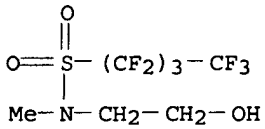
BR 2003011207		A	20050315	BR 2003-11207
				2003
				0513
US 2005171279		A1	20050804	US 2003-513969
				2003
				0513
JP 2005526924		T2	20050908	JP 2004-507593
				2003
				0513
US 2004077238		A1	20040422	US 2003-444713
				2003
				0523
PRIORITY APPLN. INFO.:			US 2002-383392P	P
				2002
				0524
			WO 2003-US15088	W
				2003
				0513

AB Title fluorochem. composition consists of a dispersion or a solution of (A) a fluorinated repellent compound and (B) a fluorochem. stain release compound (sic). The fluorinated repellent compound contains the reaction products of (I) a fluorinated polyether according to the formula: Rf-Q-Tk (I) wherein Rf represents a monovalent perfluorinated polyether group having a mol. weight of at least 750 g/mol, Q represents a chemical bond or a divalent or 10 trivalent organic linking group, T represents a functional group capable of reacting with an isocyanate, and k is 1 or 2, (II) an isocyanate component selected from a polyisocyanate compound that has at least 3 isocyanate groups or a mixture of polyisocyanate compds. wherein the average number of isocyanate groups per mol. is more than 2, and (III) optionally one or more co-reactants capable of reacting with an isocyanate group. Thus, polyester-cotton **fabrics** (e.g., carpet) were coating with a composition containing 2-butanone oxime-blocked reaction products of Voranate M 220 and poly(hexafluoropropylene oxide) heptafluoropropyl (1-(2-hydroxyethyl)aminocarbonyl) tetrafluoroethyl ether.

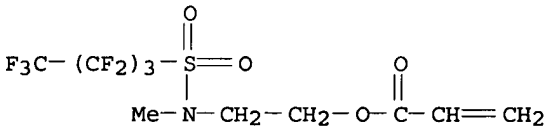
IT **34454-97-2DP**, reaction products with fluorinated polyether and isocyanates **67584-55-8DP**, reaction products with fluorinated polyether and isocyanates
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide; production of **antisoiling** oil- and water-resistant fluorochem. composition for treatment of fibrous substrate)

RN 34454-97-2 HCAPLUS

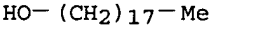
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-(2-hydroxyethyl)-N-methyl- (9CI) (CA INDEX NAME)



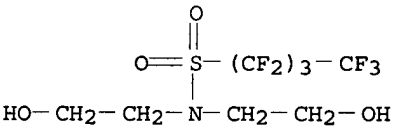
RN 67584-55-8 HCAPLUS
CN 2-Propenoic acid, 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl ester (9CI) (CA INDEX NAME)



IT **112-92-5DP**, Stearyl alcohol, reaction products with fluorinated polyether and isocyanates **34455-00-0DP**, reaction products with fluorinated polyether and isocyanates **53200-31-0DP**, Desmodur N 100, reaction products with fluorinated polyether
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(production of **antisoiling** oil- and water-resistant fluorochem. composition for treatment of fibrous substrate)
RN 112-92-5 HCAPLUS
CN 1-Octadecanol (8CI, 9CI) (CA INDEX NAME)



RN 34455-00-0 HCAPLUS
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N,N-bis(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



RN 53200-31-0 HCAPLUS
CN Desmodur N 100 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IC ICM D06M015-576
ICS C09D175-04; D06M015-53
CC 40-9 (Textiles and Fibers)
Section cross-reference(s): 42
ST **antisoiling** oil water resistant fluorochem compn treatment fibrous substrate
IT **Coating materials**
(**antisoiling**; production of **antisoiling** oil- and water-resistant fluorochem. composition for treatment of fibrous substrate)
IT **Textiles**
(cotton-polyester; production of **antisoiling** oil- and water-resistant fluorochem. composition for treatment of fibrous

substrate)

IT **Coating materials**
(oil- and water-resistant; production of **antisoiling** oil- and water-resistant fluorochem. composition for treatment of fibrous substrate)

IT Polyurethanes, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyoxyalkylene-, fluorine-containing; production of **antisoiling** oil- and water-resistant fluorochem. composition for treatment of fibrous substrate)

IT Fluoropolymers, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyoxyalkylene-polyurethane-; production of **antisoiling** oil- and water-resistant fluorochem. composition for treatment of fibrous substrate)

IT Polyoxyalkylenes, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyurethane-, fluorine-containing; production of **antisoiling** oil- and water-resistant fluorochem. composition for treatment of fibrous substrate)

IT Carpets
Oilproofing agents
Soilproofing agents
Waterproofing agents
(production of **antisoiling** oil- and water-resistant fluorochem. composition for treatment of fibrous substrate)

IT 9016-87-9DP, Voranate M 220, reaction products with fluorinated polyether
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(Mondur MR; production of **antisoiling** oil- and water-resistant fluorochem. composition for treatment of fibrous substrate)

IT **34454-97-2DP**, reaction products with fluorinated polyether and isocyanates **67584-55-8DP**, reaction products with fluorinated polyether and isocyanates
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide; production of **antisoiling** oil- and water-resistant fluorochem. composition for treatment of fibrous substrate)

IT 77-58-7
RL: CAT (Catalyst use); USES (Uses)
(curing catalyst; production of **antisoiling** oil- and water-resistant fluorochem. composition for treatment of fibrous substrate)

IT 112-00-5, Arquad 12-50 28724-32-5, Ethoquad 18-25 54116-08-4, Sermul EA 266
RL: MOA (Modifier or additive use); USES (Uses)
(emulsifier; production of **antisoiling** oil- and water-resistant fluorochem. composition for treatment of fibrous substrate)

IT 96-29-7, 2-Butanone oxime
RL: RCT (Reactant); RACT (Reactant or reagent)
(isocyanate-blocking agent; production of **antisoiling** oil- and water-resistant fluorochem. composition for treatment of fibrous substrate)

IT 101-68-8DP, Diphenylmethane diisocyanate, reaction products with fluorinated polyether **112-92-5DP**, Stearyl alcohol, reaction products with fluorinated polyether and isocyanates 3779-63-3DP, Tris(6-isocyanatohexyl)isocyanurate, reaction

products with fluorinated polyether 9004-74-4DP, MPEG 750, reaction products with fluorinated polyether and isocyanates 25119-62-4DP, Allyl alcohol-styrene copolymer, reaction products with fluorinated polyether and isocyanates 31566-31-1DP, Glycerol monostearate, reaction products with fluorinated polyether and isocyanates **34455-00-0DP**, reaction products with fluorinated polyether and isocyanates **53200-31-0DP**, Desmodur N 100, reaction products with fluorinated polyether 118550-50-8DP, Tolonate HDT, reaction products with fluorinated polyether 627909-42-6DP, reaction products with isocyanate compds. 627909-43-7DP, reaction products with isocyanate compds.
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(production of **antisoiling** oil- and water-resistant fluorochem. composition for treatment of fibrous substrate)

IT 919-30-2, APTES
RL: MOA (Modifier or additive use); USES (Uses)
(production of **antisoiling** oil- and water-resistant fluorochem. composition for treatment of fibrous substrate)

IT 822-06-0D, HDI, reaction products with fluorinated polyether
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(production of **antisoiling** oil- and water-resistant fluorochem. composition for treatment of fibrous substrate)

IT 98-08-8, α,α,α,-Trifluorotoluene 219484-64-7, HFE 7100
RL: NUU (Other use, unclassified); USES (Uses)
(solvent; production of **antisoiling** oil- and water-resistant fluorochem. composition for treatment of fibrous substrate)

IT 141-43-5, Ethanolamine, reactions 616-30-8, 3-Amino-1,2-propanediol 146185-22-0D, reaction products with isocyanate compds.
RL: RCT (Reactant); RACT (Reactant or reagent)
(starting materials; production of **antisoiling** oil- and water-resistant fluorochem. composition for treatment of fibrous substrate)

IT 628301-64-4, Rewopon IM/OA
RL: MOA (Modifier or additive use); USES (Uses)
(surfactant; production of **antisoiling** oil- and water-resistant fluorochem. composition for treatment of fibrous substrate)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L114 ANSWER 10 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:150539 HCAPLUS
DOCUMENT NUMBER: 138:172231
TITLE: Alkylated fluorochemical oligomers and use thereof in the treatment of fibrous substrates
INVENTOR(S): Jariwala, Chetan P.; Eggleston, James D.; Yandrasits, Michael A.; Dams, Rudolf J.
PATENT ASSIGNEE(S): 3M Innovative Properties Company, USA
SOURCE: U.S., 17 pp., Cont.-in-part of U.S. 6,288,157.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

US 6525127	B1	20030225	US 2000-708372	2000 1108
US 6288157	B1	20010911	US 1999-309836	1999 0511
WO 2002038850	A2	20020516	WO 2001-US46983	2001 1106
WO 2002038850	A3	20030103		
W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002032513	A5	20020521	AU 2002-32513	2001 1106
EP 1356153	A2	20031029	EP 2001-992037	2001 1106
EP 1356153	B1	20040804		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
AT 272738	E	20040815	AT 2001-992037	2001 1106
ES 2223951	T3	20050301	ES 2001-1992037	2001 1106
US 2004024262	A1	20040205	US 2003-399415	2003 0417
PRIORITY APPLN. INFO.:			US 1999-309836 A2	1999 0511
			US 2000-708372 A	2000 1108
			WO 2001-US46983 W	2001 1106

AB This invention provides a method of treating fibrous substrates, such as leather, by contacting the substrate with a fluorochem. compound comprising: a fluorochem. oligomeric portion comprising an aliphatic backbone with a plurality of pendant fluoroaliph. groups, each fluoroaliph. group having a fully fluorinated terminal group and each independently linked to a carbon atom of the aliphatic backbone through an organic linking group; an aliphatic moiety; and a linking group which links the fluorochem. oligomeric portion to the aliphatic moiety. The fluorochem. compds. provide desirable oil, water and stain repellency to fibrous substrates. C4F9SO2N(CH3)CH2CH2OH acrylate was telomerized with 2-mercaptoethanol, then esterified with stearic acid to give a repellent.

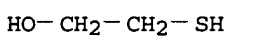
IT **306997-46-6P**

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(alkylated fluorochem. oligomers and use thereof in the treatment of fibrous substrates)

RN 306997-46-6 HCAPLUS
CN 2-Propenoic acid, 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl ester, telomer with 2-mercaptoethanol (9CI) (CA INDEX NAME)

CM 1

CRN 60-24-2
CMF C2 H6 O S

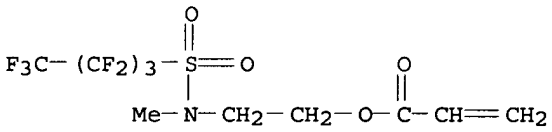


CM 2

CRN 306997-45-5
CMF (C10 H10 F9 N O4 S)x
CCI PMS

CM 3

CRN 67584-55-8
CMF C10 H10 F9 N O4 S

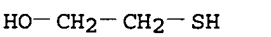


IT **306997-46-6DP**, reaction product with EMPOL 1008
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(alkylated fluorochem. oligomers and use thereof in the treatment of fibrous substrates)

RN 306997-46-6 HCAPLUS
CN 2-Propenoic acid, 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl ester, telomer with 2-mercaptoethanol (9CI) (CA INDEX NAME)

CM 1

CRN 60-24-2
CMF C2 H6 O S

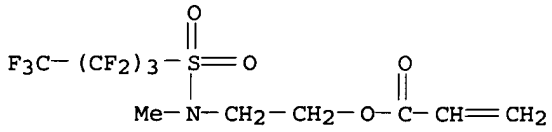


CM 2

CRN 306997-45-5
CMF (C10 H10 F9 N O4 S)x
CCI PMS

CM 3

CRN 67584-55-8
CMF C10 H10 F9 N O4 S



IC ICM C08K005-02
INCL 524462000; 524544000; 524560000; 525199000; 525200000; 525276000
CC 45-2 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
IT **306997-46-6P** 306997-47-7P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(alkylated fluorochem. oligomers and use thereof in the treatment of fibrous substrates)
IT 150872-29-0DP, EMPOL 1008, reaction product with 2-mercaptoethanol telomer of 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl acrylate **306997-46-6DP**, reaction product with EMPOL 1008 307335-91-7P 497881-82-0P 497881-83-1P 497881-85-3P 497881-86-4P 497881-87-5P 497881-88-6P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(alkylated fluorochem. oligomers and use thereof in the treatment of fibrous substrates)
REFERENCE COUNT: 82 THERE ARE 82 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L114 ANSWER 11 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:716340 HCAPLUS
DOCUMENT NUMBER: 137:249186
TITLE: Water- and **oil-repellency** -imparting urethane oligomers comprising perfluoroalkyl moieties
INVENTOR(S): Qiu, Zai-Ming; Clark, John C.; Fan, Wayne W.; Jariwala, Chetan P.; Flynn, Richard M.
PATENT ASSIGNEE(S): 3M Innovative Properties Company, USA
SOURCE: PCT Int. Appl., 88 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002072657	A1	20020919	WO 2001-US49669	2001 1226
W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003026997	A1	20030206	US 2001-803702	2001

				0309
US 6803109	B2	20041012		
CA 2439252	AA	20020919	CA 2001-2439252	
				2001
				1226
EP 1370596	A1	20031217	EP 2001-994352	
				2001
				1226
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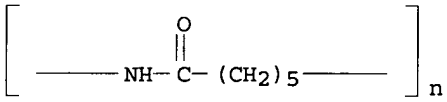
BR 2001016917	A	20040427	BR 2001-16917	
				2001
				1226
CN 1507460	A	20040623	CN 2001-823004	
				2001
				1226
JP 2004530002	T2	20040930	JP 2002-571562	
				2001
				1226
PRIORITY APPLN. INFO.:			US 2001-803702 A	
				2001
				0309
			WO 2001-US49669 W	
				2001
				1226

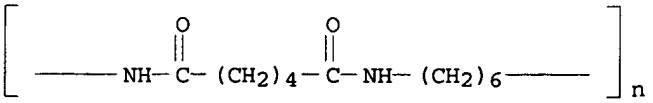
AB Fluorochem. urethane compns. comprising one or more compds. or oligomers having at least on fluorine-containing repeatable unit and at least one fluorine-containing terminal group are described. The compns. are useful as coatings or incorporated as melt additives. The fluorochem. compns. impart oil and **water repellency** to the substrate. In other aspects, this invention relates to processes for imparting oil and **water repellency** characteristics to substrates and articles such as limestone tiles, carpets, **fabrics**, and paper. A typical polymer was manufactured by heating EtOAc containing 1.84 g C4F9SO2N(C2H4OH)2, 3.52 g C4F9SO2NMeC2H4OH, 1.66 g HDI, and 2 drops dibutyltin dilaurate 4 h at 65°.

IT **25038-54-4**, Nylon 6, miscellaneous **32131-17-2**, Nylon 66, miscellaneous
RL: MSC (Miscellaneous)
(**fibers**, substrates; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

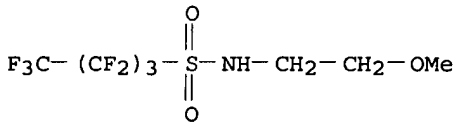
RN 25038-54-4 HCAPLUS
CN Poly[imino(1-oxo-1,6-hexanediyl)] (9CI) (CA INDEX NAME)



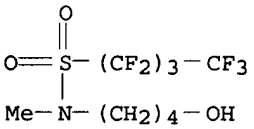
RN 32131-17-2 HCAPLUS
CN Poly[imino(1,6-dioxo-1,6-hexanediyl)imino-1,6-hexanediyl] (9CI) (CA INDEX NAME)



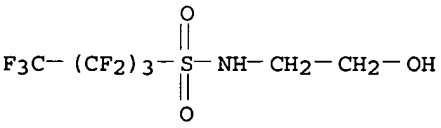
IT **40630-68-0P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(terminating compound precursor; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups moieties for coatings)
RN 40630-68-0 HCAPLUS
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-(2-methoxyethyl)- (9CI) (CA INDEX NAME)



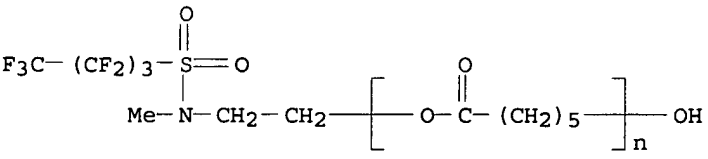
IT **812-94-2P 34454-99-4P 460349-73-9P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(terminating compound; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)
RN 812-94-2 HCAPLUS
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-(4-hydroxybutyl)-N-methyl- (6CI, 8CI, 9CI) (CA INDEX NAME)



RN 34454-99-4 HCAPLUS
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



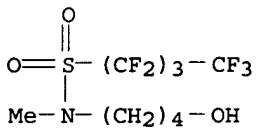
RN 460349-73-9 HCAPLUS
CN Poly[oxy(1-oxo-1,6-hexanediyl)], α-[2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl]-ω-hydroxy- (9CI) (CA INDEX NAME)



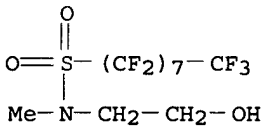
IT **812-94-2DP**, N-(4-Hydroxybutyl)-N-

methylperfluorobutanesulfonamide, reaction products with fluoropolyurethanes **24448-09-7DP**, N-(2-Hydroxyethyl)-N-methylperfluorooctanesulfonamide, reaction products with fluoropolyurethanes **34454-99-4DP**, N-(2-Hydroxyethyl)-1,1,2,2,3,3,4,4,4-nonafluorobutanesulfonamide, reaction products with fluoropolyurethanes **460349-73-9DP**, reaction products with fluoropolyurethanes **460349-74-0DP**, N,N-Bis(2-hydroxyethyl)nonafluorobutanesulfonamide-hexamethylene diisocyanate copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-75-1DP**, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-76-2DP**, N,N-Bis(2-hydroxyethyl)perfluorooctanesulfonamide-hexamethylene diisocyanate copolymer, reaction products with (hydroxyethyl)(methyl)perfluorooctanesulfonamide **460349-77-3DP**, reaction products with (hydroxyethyl)(methyl)perfluorooctanesulfonamide **460349-78-4DP**, N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide-1,12-dodecane diisocyanate copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-79-5DP**, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-80-8DP**, N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide-tetramethylene diisocyanate copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-81-9DP**, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-82-0DP**, N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide-octamethylene diisocyanate copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-83-1DP**, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-84-2DP**, N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide-ethylene glycol-hexamethylene diisocyanate copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-85-3DP**, N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide-1,4-butanediol-hexamethylene diisocyanate copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-86-4DP**, N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide-diethylene glycol-hexamethylene diisocyanate copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-88-6DP**, N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide-2,2,3,3,4,4-hexafluoro-1,5-pentanediol-hexamethylene diisocyanate copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-92-2DP**, N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide-N,N-bis(2-hydroxyethyl)methylamine-hexamethylene diisocyanate copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-94-4DP**, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-95-5DP**, N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide-Desmodur N-100 copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-96-6DP**, N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide-Desmodur N-100-hexamethylene diisocyanate copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-97-7DP**, N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide-Desmodur N-3300 copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-98-8DP**, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-99-9DP**, N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide-Desmodur N-3400 copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide

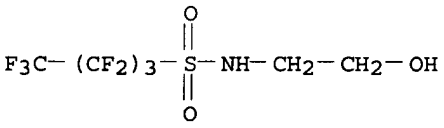
460350-03-2P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)
RN 812-94-2 HCAPLUS
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-(4-hydroxybutyl)-N-methyl- (6CI, 8CI, 9CI) (CA INDEX NAME)



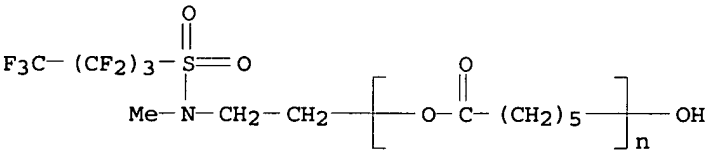
RN 24448-09-7 HCAPLUS
CN 1-Octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-(2-hydroxyethyl)-N-methyl- (8CI, 9CI) (CA INDEX NAME)



RN 34454-99-4 HCAPLUS
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



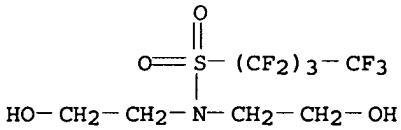
RN 460349-73-9 HCAPLUS
CN Poly[oxy(1-oxo-1,6-hexanediyl)], α-[2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl]-ω-hydroxy- (9CI) (CA INDEX NAME)



RN 460349-74-0 HCAPLUS
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N,N-bis(2-hydroxyethyl)-, polymer with 1,6-diisocyanatohexane (9CI) (CA INDEX NAME)

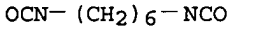
CM 1

CRN 34455-00-0
CMF C8 H10 F9 N O4 S

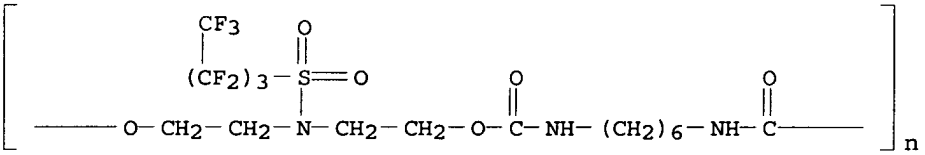


CM 2

CRN 822-06-0
CMF C8 H12 N2 O2



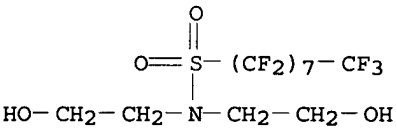
RN 460349-75-1 HCAPLUS
CN Poly[oxy-1,2-ethanediyl[[(nonafluorobutyl)sulfonyl]imino]-1,2-ethanediyloxycarbonylimino-1,6-hexanediyliminocarbonyl] (9CI) (CA INDEX NAME)



RN 460349-76-2 HCAPLUS
CN 1-Octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N,N-bis(2-hydroxyethyl)-, polymer with 1,6-diisocyanatohexane (9CI) (CA INDEX NAME)

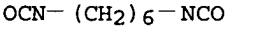
CM 1

CRN 40630-61-3
CMF C12 H10 F17 N O4 S

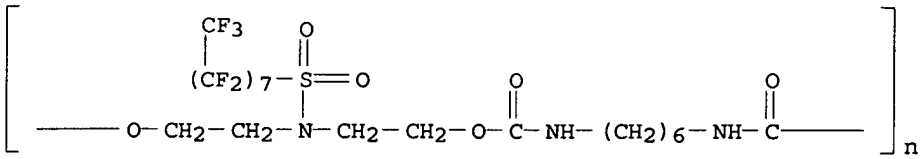


CM 2

CRN 822-06-0
CMF C8 H12 N2 O2



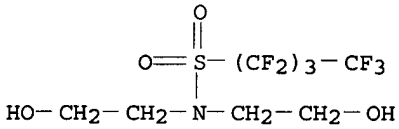
RN 460349-77-3 HCAPLUS
CN Poly[oxy-1,2-ethanediyl[[(heptadecafluorooctyl)sulfonyl]imino]-1,2-ethanediyloxycarbonylimino-1,6-hexanediyliminocarbonyl] (9CI) (CA INDEX NAME)



RN 460349-78-4 HCAPLUS
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N,N-bis(2-hydroxyethyl)-, polymer with 1,12-diisocyanatododecane (9CI) (CA INDEX NAME)

CM 1

CRN 34455-00-0
CMF C8 H10 F9 N O4 S



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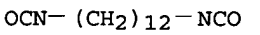
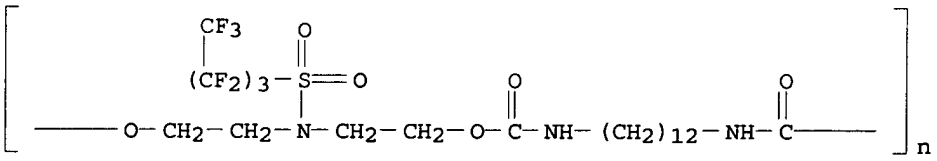


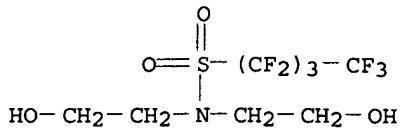
RN 460349-79-5 HCAPLUS
CN Poly[oxy-1,2-ethanediyl[[(nonafluorobutyl)sulfonyl]imino]-1,2-ethanediyloxycarbonylimino-1,12-dodecanediyliminocarbonyl] (9CI) (CA INDEX NAME)



RN 460349-80-8 HCAPLUS
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N,N-bis(2-hydroxyethyl)-, polymer with 1,4-diisocyanatobutane (9CI) (CA INDEX NAME)

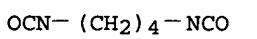
CM 1

CRN 34455-00-0
CMF C8 H10 F9 N O4 S

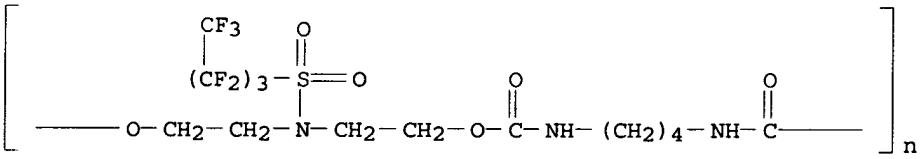


CM 2

CRN 4538-37-8
CMF C6 H8 N2 O2



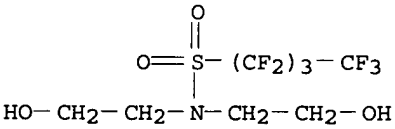
RN 460349-81-9 HCAPLUS
CN Poly[oxy-1,2-ethanediyl[[(nonafluorobutyl)sulfonyl]imino]-1,2-ethanediyloxycarbonylimino-1,4-butanediyliminocarbonyl] (9CI) (CA INDEX NAME)



RN 460349-82-0 HCAPLUS
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N,N-bis(2-hydroxyethyl)-, polymer with 1,8-diisocyanatooctane (9CI) (CA INDEX NAME)

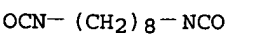
CM 1

CRN 34455-00-0
CMF C8 H10 F9 N O4 S

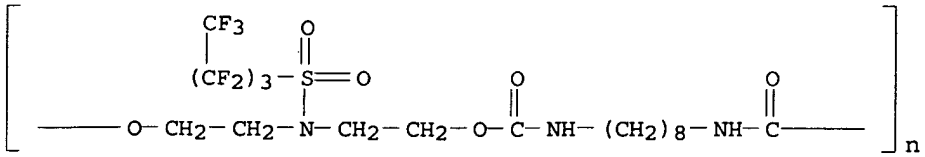


CM 2

CRN 10124-86-4
CMF C10 H16 N2 O2



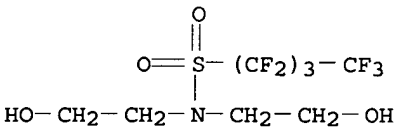
RN 460349-83-1 HCAPLUS
CN Poly[oxy-1,2-ethanediyl[[(nonafluorobutyl)sulfonyl]imino]-1,2-ethanediyloxycarbonylimino-1,8-octanediyliminocarbonyl] (9CI) (CA INDEX NAME)



RN 460349-84-2 HCAPLUS
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N,N-bis(2-hydroxyethyl)-, polymer with 1,6-diisocyanatohexane and 1,2-ethanediol (9CI) (CA INDEX NAME)

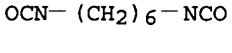
CM 1

CRN 34455-00-0
CMF C8 H10 F9 N O4 S



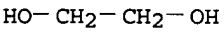
CM 2

CRN 822-06-0
CMF C8 H12 N2 O2



CM 3

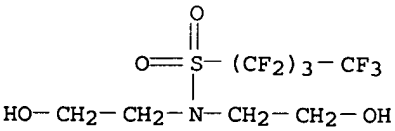
CRN 107-21-1
CMF C2 H6 O2



RN 460349-85-3 HCAPLUS
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N,N-bis(2-hydroxyethyl)-, polymer with 1,4-butanediol and 1,6-diisocyanatohexane (9CI) (CA INDEX NAME)

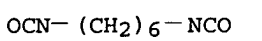
CM 1

CRN 34455-00-0
CMF C8 H10 F9 N O4 S



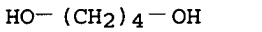
CM 2

CRN 822-06-0
CMF C8 H12 N2 O2



CM 3

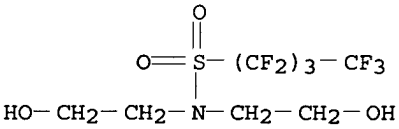
CRN 110-63-4
CMF C4 H10 O2



RN 460349-86-4 HCAPLUS
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N,N-bis(2-hydroxyethyl)-, polymer with 1,6-diisocyanatohexane and 2,2'-oxybis[ethanol] (9CI) (CA INDEX NAME)

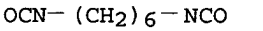
CM 1

CRN 34455-00-0
CMF C8 H10 F9 N O4 S



CM 2

CRN 822-06-0
CMF C8 H12 N2 O2



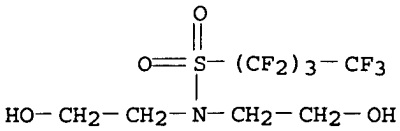
CM 3

CRN 111-46-6
CMF C4 H10 O3

RN 460349-88-6 HCAPLUS
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N,N-bis(2-hydroxyethyl)-, polymer with 1,6-diisocyanatohexane and 2,2,3,3,4,4-hexafluoro-1,5-pentanediol (9CI) (CA INDEX NAME)

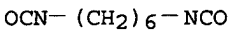
CM 1

CRN 34455-00-0
CMF C8 H10 F9 N O4 S



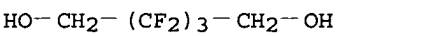
CM 2

CRN 822-06-0
CMF C8 H12 N2 O2



CM 3

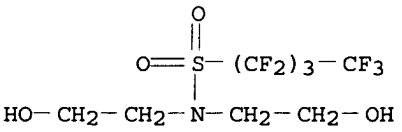
CRN 376-90-9
CMF C5 H6 F6 O2



RN 460349-92-2 HCAPLUS
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N,N-bis(2-hydroxyethyl)-, polymer with 1,6-diisocyanatohexane and 2,2'-(methylimino)bis[ethanol] (9CI) (CA INDEX NAME)

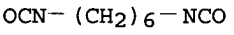
CM 1

CRN 34455-00-0
CMF C8 H10 F9 N O4 S



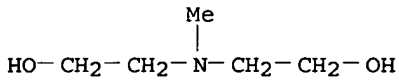
CM 2

CRN 822-06-0
CMF C8 H12 N2 O2



CM 3

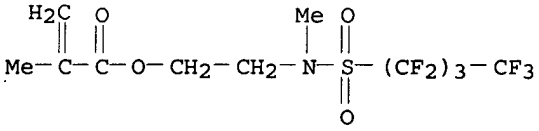
CRN 105-59-9
CMF C5 H13 N O2



RN 460349-94-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with 1,6-diisocyanatohexane and 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

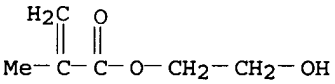
CM 1

CRN 67584-59-2
CMF C11 H12 F9 N O4 S



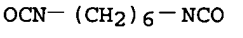
CM 2

CRN 868-77-9
CMF C6 H10 O3



CM 3

CRN 822-06-0
CMF C8 H12 N2 O2



RN 460349-95-5 HCAPLUS
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N,N-bis(2-hydroxyethyl)-, polymer with Desmodur N 100 (9CI) (CA INDEX NAME)

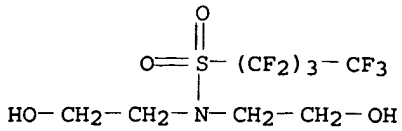
CM 1

CRN 53200-31-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 34455-00-0
CMF C8 H10 F9 N O4 S



RN 460349-96-6 HCAPLUS
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N,N-bis(2-hydroxyethyl)-, polymer with Desmodur N 100 and 1,6-diisocyanatohexane (9CI) (CA INDEX NAME)

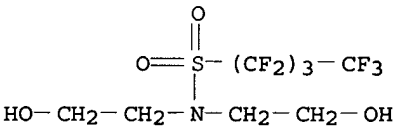
CM 1

CRN 53200-31-0
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

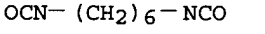
CM 2

CRN 34455-00-0
CMF C8 H10 F9 N O4 S



CM 3

CRN 822-06-0
CMF C8 H12 N2 O2



RN 460349-97-7 HCAPLUS
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N,N-bis(2-hydroxyethyl)-, polymer with Desmodur N 3300 (9CI) (CA INDEX NAME)

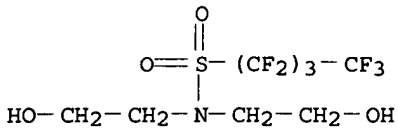
CM 1

CRN 104559-01-5
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

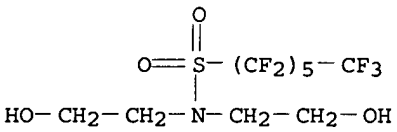
CRN 34455-00-0
CMF C8 H10 F9 N O4 S



RN 460349-98-8 HCAPLUS
CN 1-Hexanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-N,N-bis(2-hydroxyethyl)-, polymer with Desmodur N 3300 (9CI) (CA INDEX NAME)

CM 1

CRN 185689-61-6
CMF C10 H10 F13 N O4 S



CM 2

CRN 104559-01-5
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 460349-99-9 HCAPLUS
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N,N-bis(2-hydroxyethyl)-, polymer with Desmodur N 3400 (9CI) (CA INDEX NAME)

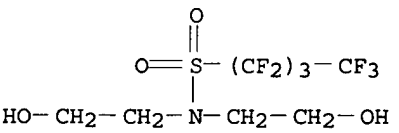
CM 1

CRN 165169-07-3
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 34455-00-0
CMF C8 H10 F9 N O4 S



RN 460350-03-2 HCAPLUS
CN Glycine, N,N-bis(2-hydroxyethyl)-, polymer with Desmodur N 3300 and 1,1,2,2,3,3,4,4,4-nonafluoro-N,N-bis(2-hydroxyethyl)-1-butanesulfonamide (9CI) (CA INDEX NAME)

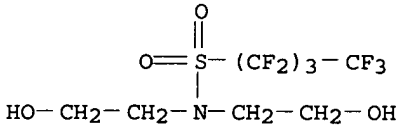
CM 1

CRN 104559-01-5
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

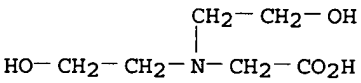
CM 2

CRN 34455-00-0
CMF C8 H10 F9 N O4 S



CM 3

CRN 150-25-4
CMF C6 H13 N O4



IC ICM C08G018-38
ICS C08G018-28; C08G018-50; D06M013-428; D06M015-576
CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 40, 43, 57
ST fluoropolyurethane waterproof oilproof coating limestone tile; paper fluoropolyurethane waterproof oilproof coating; carpet fluoropolyurethane waterproof oilproof finish; **fabric** fluoropolyurethane waterproof oilproof finish; bishydroxyethyl perfluorobutanesulfonamide HDI copolymer manuf oilproof waterproof coating
IT Polyamide **fibers**, miscellaneous
RL: MSC (Miscellaneous)
(6, substrates; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)
IT Polyamide **fibers**, miscellaneous
RL: MSC (Miscellaneous)
(66, substrates; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)
IT Polyurethanes, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic-polyamine-, fluorine-containing; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)
IT Fluoropolymers, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic-polyamine-polyurethane-; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT Polyamines
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic-polyurethane-, fluorine-containing; water- and **oil**-**repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT **Fabric** finishing
(agents; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for **textile** finishing agents)

IT Amines, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(coco alkyl, ethoxylated, Ethomeen C-25, fluoropolyurethanes, salts; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT Polyamide **fibers**, miscellaneous
RL: MSC (Miscellaneous)
(**fabrics**, substrates; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT Polyamides, miscellaneous
RL: MSC (Miscellaneous)
(**fibers**, substrates; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT Polyamides, miscellaneous
RL: MSC (Miscellaneous)
(films, substrates; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT Polyurethanes, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(fluorine-containing; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT **Coating materials**
(oil- and water-resistant; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT Polyurethanes, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyamine-, fluorine-containing; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT Polyurethanes, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyamine-polyether-, fluorine-containing; water- and **oil**-**repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT Fluoropolymers, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyamine-polyether-polyurethane-; water- and **oil-repellency**-imparting urethane oligomers comprising

fluorine-containing repeating units and terminal groups for coatings)

IT Polyurethanes, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyamine-polyisocyanurate-, fluorine-containing; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT Polyurethanes, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyamine-polyisocyanurate-polyoxyalkylene-, fluorine-containing; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT Fluoropolymers, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyamine-polyisocyanurate-polyoxyalkylene-polyurethane-; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT Polyoxyalkylenes, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyamine-polyisocyanurate-polyurethane-, fluorine-containing; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT Fluoropolymers, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyamine-polyisocyanurate-polyurethane-; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT Polyurethanes, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyamine-polyoxyalkylene-, fluorine-containing; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT Polyisocyanurates
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyamine-polyoxyalkylene-polyurethane-, fluorine-containing; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT Fluoropolymers, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyamine-polyoxyalkylene-polyurethane-; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT Polyethers, uses
Polyisocyanurates
Polyoxyalkylenes, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyamine-polyurethane-, fluorine-containing; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups

for coatings)
IT Fluoropolymers, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyamine-polyurethane-; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)
IT Polyurethanes, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyether-, fluorine-containing; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)
IT Polyamines
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyether-polyurethane-, fluorine-containing; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)
IT Fluoropolymers, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyether-polyurethane-; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)
IT Polyamines
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyisocyanurate-polyoxyalkylene-polyurethane-, fluorine-containing; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)
IT Polyamines
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyisocyanurate-polyurethane-, fluorine-containing; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)
IT Polyamines
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyoxyalkylene-polyurethane-, fluorine-containing; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)
IT Polyamines
Polyethers, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyurethane-, fluorine-containing; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)
IT Fluoropolymers, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyurethane-; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)
IT Polyesters, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered

material use); PREP (Preparation); USES (Uses)
(reaction products, with fluoropolyurethanes; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT Limestone, miscellaneous
RL: MSC (Miscellaneous)
(substrate; water- and **oil-repellency** -imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT Carpets
Paper
Plastic films
(substrates; water- and **oil-repellency** -imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT Molded plastics, miscellaneous
RL: MSC (Miscellaneous)
(substrates; water- and **oil-repellency** -imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT **25038-54-4**, Nylon 6, miscellaneous **32131-17-2**, Nylon 66, miscellaneous
RL: MSC (Miscellaneous)
(**fibers**, substrates; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT 24647-14-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(monomer precursor; water- and **oil-repellency** -imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT 43181-25-5P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(monomer; water- and **oil-repellency** -imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT 109-85-3, 2-Methoxyethylamine 660-12-8, 1-Butanesulfonyl fluoride 6962-92-1, 4-Chlorobutyl acetate 16867-25-7, N-Methyl-1-butanesulfonamide
RL: RCT (Reactant); RACT (Reactant or reagent)
(terminating compound precursor; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT **40630-68-0P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(terminating compound precursor; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups moieties for coatings)

IT **812-94-2P 34454-99-4P 460349-73-9P** 460987-01-3P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(terminating compound; water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

IT 75-89-8DP, 2,2,2-Trifluoroethanol, reaction products with fluoropolyurethanes 96-29-7DP, 2-Butanone oxime, reaction products with fluoropolyurethanes 105-59-9DP, N-Methyldiethanolamine, salts with carboxy group-containing

fluoropolymers **812-94-2DP**, N-(4-Hydroxybutyl)-N-methylperfluorobutanesulfonamide, reaction products with fluoropolyurethanes 818-61-1DP, 2-Hydroxyethyl acrylate, reaction products with fluoropolyurethanes 868-77-9DP, 2-Hydroxyethyl methacrylate, reaction products with fluoropolyurethanes **24448-09-7DP**, N-(2-Hydroxyethyl)-N-methylperfluorooctanesulfonamide, reaction products with fluoropolyurethanes **34454-99-4DP**, N-(2-Hydroxyethyl)-1,1,2,2,3,3,4,4,4-nonafluorobutanesulfonamide, reaction products with fluoropolyurethanes 93894-53-2DP, reaction products with fluoropolyurethanes **460349-73-9DP**, reaction products with fluoropolyurethanes **460349-74-0DP**, N,N-Bis(2-hydroxyethyl)nonafluorobutanesulfonamide-hexamethylene diisocyanate copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-75-1DP**, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-76-2DP**, N,N-Bis(2-hydroxyethyl)perfluorooctanesulfonamide-hexamethylene diisocyanate copolymer, reaction products with (hydroxyethyl)(methyl)perfluorooctanesulfonamide **460349-77-3DP**, reaction products with (hydroxyethyl)(methyl)perfluorooctanesulfonamide **460349-78-4DP**, N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide-1,12-dodecane diisocyanate copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-79-5DP**, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-80-8DP**, N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide-tetramethylene diisocyanate copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-81-9DP**, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-82-0DP**, N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide-octamethylene diisocyanate copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-83-1DP**, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-84-2DP**, N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide-ethylene glycol-hexamethylene diisocyanate copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-85-3DP**, N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide-1,4-butanediol-hexamethylene diisocyanate copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-86-4DP**, N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide-diethylene glycol-hexamethylene diisocyanate copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide 460349-87-5DP, N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide-ethylene oxide-hexamethylene diisocyanate-propylene oxide block copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-88-6DP**, N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide-2,2,3,3,4,4-hexafluoro-1,5-pentanediol-hexamethylene diisocyanate copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide 460349-90-0DP, 1,5-Bis(2-hydroxy-1,1-fluoroethoxy)perfluoropentane-hexamethylene diisocyanate copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide 460349-91-1DP, 1,5-Bis(2-hydroxy-1,1-fluoroethoxy)perfluoropentane-hexamethylene diisocyanate copolymer, sru, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-92-2DP**, N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide-N,N-bis(2-hydroxyethyl)methylamine-hexamethylene diisocyanate copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide 460349-93-3DP, N-(2-Hydroxyethyl)-1,1,2,2,3,3,3-heptafluoropropanesulfonamide,

reaction products with fluoropolyurethanes **460349-94-4DP**, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-95-5DP**, N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide-Desmodur N-100 copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-96-6DP**, N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide-Desmodur N-100-hexamethylene diisocyanate copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-97-7DP**, N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide-Desmodur N-3300 copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-98-8DP**, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460349-99-9DP**, N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide-Desmodur N-3400 copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide 460350-00-9DP, N,N-Bis(2-hydroxyethyl)perfluorobutanesulfonamide-Desmodur N-3400-MDI copolymer, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide 460350-01-0DP, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide 460350-02-1DP, reaction products with (hydroxyethyl)(methyl)perfluorobutanesulfonamide **460350-03-2P** 460350-05-4P 460987-01-3DP, reaction products with fluoropolyurethanes
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(water- and **oil-repellency**-imparting urethane oligomers comprising fluorine-containing repeating units and terminal groups for coatings)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L114 ANSWER 12 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:709074 HCAPLUS
DOCUMENT NUMBER: 137:233752
TITLE: Artificial leathers with good fire, mould, and water repellency, and their manufacture
INVENTOR(S): Ikeyama, Masami; Iijima, Hiromichi
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002266253	A2	20020918	JP 2001-64663	2001 0308

PRIORITY APPLN. INFO.: JP 2001-64663 2001 0308

AB The artificial leathers comprising elastomer-impregnated super fine fibers and/or their fabrics contain (A) phosphazenes P(X1)(X1):NP(X2)(Y2):NP(X3)(Y3):N and/or P(X1)(X1):NP(X2)(Y2):NP(X3)(Y3):NP(X4)(Y4):N (X1-4, Y1-4 = amino, PhO) 1.5-10, (B) benzimidazoles 0.1-5, and (C) polyfluoroalkyl-containing urethanes 0.1-5%. Thus, a PET-polystyrene islands-in-the-sea bicomponent fiber felt was impregnated with polyether-polyester-polyurethane rubbers, treated with dyes and

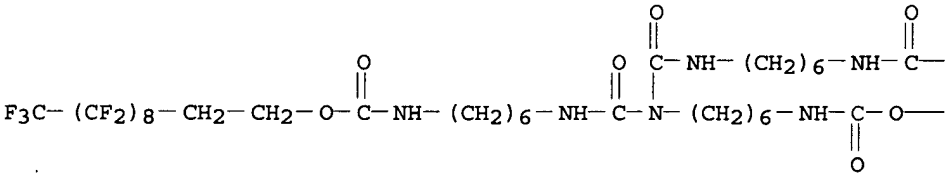
tetraphenoxydiaminocyclotriphosphazene, washed, further treated with C9F19CH2CH2OCONH(CH2)6NH[CON[(CH2)6NHCO2CH2CH2C9F19]]2H and 2-methoxycarbonylaminobenzimidazole, and dried to give an artificial leather showing good water and mold resistance even after 5-time washing.

IT **457892-32-9**
RL: TEM (Technical or engineered material use); USES (Uses)
(water repellent agent; artificial leather with good fire, mold, and water repellency)

RN 457892-32-9 HCAPLUS

CN 2,9,11,13,20-Pentaazaheneicosanedioic acid, 11-[6-[[[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-nonadecafluoroundecyl)oxy]carbonyl]amino]hexyl]-10,12-dioxo-, bis(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-nonadecafluoroundecyl) ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

—O—CH2—CH2—(CF2)8—CF3

—CH2—CH2—(CF2)8—CF3

IC ICM D06N003-00
ICS C08K005-3447; C08L075-04; C08L085-02; C08L101-00; D04H001-42; D06M013-352; D06M015-576; D06M015-673

CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): **40**

IT **457892-32-9**
RL: TEM (Technical or engineered material use); USES (Uses)
(water repellent agent; artificial leather with good fire, mold, and water repellency)

L114 ANSWER 13 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:592215 HCAPLUS
DOCUMENT NUMBER: 137:141784
TITLE: **Antisoiling** coating compositions and **fiber** products treated with them
INVENTOR(S): Maekawa, Takashige; Shindo, Minako; Seki, Takashi; Oharu, Kazuya; Furuta, Shoji
PATENT ASSIGNEE(S): Asahi Glass Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002220781	A2	20020809	JP 2001-17403	

PRIORITY APPLN. INFO.: JP 2001-17403 2001 0125

2001 0125

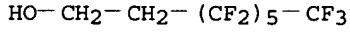
OTHER SOURCE(S): MARPAT 137:141784

AB The compns. contain Rf1XO2CACO2YRf2 (I; Rf1, Rf2 = C≤22 perfluoroalkyl; X, Y = divalent organic group; A = C1-8 divalent org group). Thus, a nylon loop pile carpet was coated with an emulsion containing I (A = X = Y = CH2, Rf1 = Rf2 = mixture of C6F13, C8F17, C10F21, C12F25, and C14F29 at molar ratio of 2:50:30:15:3), showing good water and **oil repellency** and soil resistance.

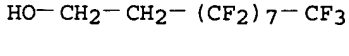
IT **112-92-5DP**, Stearyl alcohol, reaction products with HDI trimer and perfluoroalkyl alcs. **647-42-7DP**, reaction products with HDI trimer, perfluoroalkyl alcs., and stearyl alc. **678-39-7DP**, reaction products with HDI trimer, perfluoroalkyl alcs., and stearyl alc. **865-86-1DP**, reaction products with HDI trimer, perfluoroalkyl alcs., and stearyl alc. **39239-77-5DP**, reaction products with HDI trimer, perfluoroalkyl alcs., and stearyl alc. **60699-51-6DP**, reaction products with HDI trimer, perfluoroalkyl alcs., and stearyl alc. **444890-32-8P** **444890-33-9P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**antisoiling** coating compns. for **fiber** products)

RN 112-92-5 HCAPLUS
CN 1-Octadecanol (8CI, 9CI) (CA INDEX NAME)

RN 647-42-7 HCAPLUS
CN 1-Octanol, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro- (7CI, 8CI, 9CI) (CA INDEX NAME)

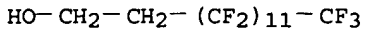


RN 678-39-7 HCAPLUS
CN 1-Decanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro- (7CI, 8CI, 9CI) (CA INDEX NAME)

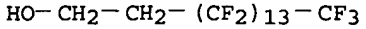


RN 865-86-1 HCAPLUS
CN 1-Dodecanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluoro- (7CI, 8CI, 9CI) (CA INDEX NAME)

RN 39239-77-5 HCAPLUS
CN 1-Tetradecanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluoro- (9CI) (CA INDEX NAME)



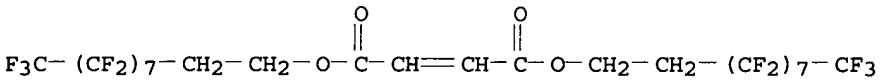
RN 60699-51-6 HCAPLUS
CN 1-Hexadecanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafluoro- (9CI) (CA INDEX NAME)



RN 444890-32-8 HCAPLUS
CN 2-Butenedioic acid, bis(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl) ester, polymer with methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

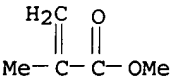
CM 1

CRN 49676-48-4
CMF C24 H10 F34 O4



CM 2

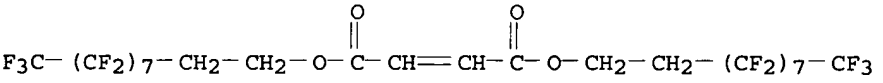
CRN 80-62-6
CMF C5 H8 O2



RN 444890-33-9 HCAPLUS
CN 2-Butenedioic acid, bis(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl) ester, polymer with ethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

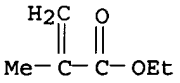
CM 1

CRN 49676-48-4
CMF C24 H10 F34 O4



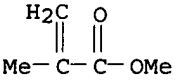
CM 2

CRN 97-63-2
CMF C6 H10 O2

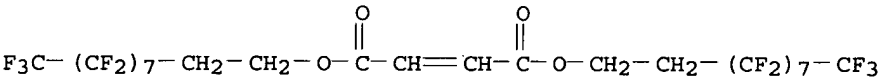


CM 3

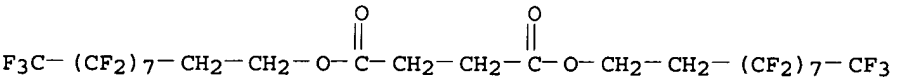
CRN 80-62-6
CMF C5 H8 O2



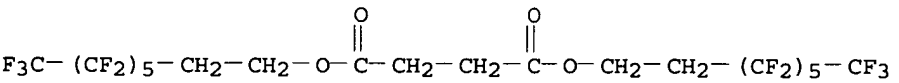
IT **49676-48-4 261928-47-6 444890-28-2**
444890-29-3 444890-30-6 444890-31-7
RL: TEM (Technical or engineered material use); USES (Uses)
(**antisoiling** coating compns. for **fiber** products)
RN 49676-48-4 HCAPLUS
CN 2-Butenedioic acid, bis(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl) ester (9CI) (CA INDEX NAME)



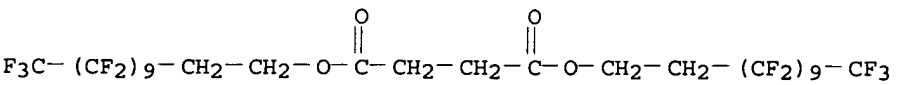
RN 261928-47-6 HCAPLUS
CN Butanedioic acid, bis(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl) ester (9CI) (CA INDEX NAME)



RN 444890-28-2 HCAPLUS
CN Butanedioic acid, bis(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl) ester (9CI) (CA INDEX NAME)

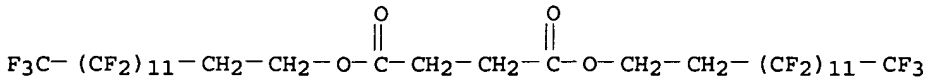


RN 444890-29-3 HCAPLUS
CN Butanedioic acid, bis(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12-heneicosafluorododecyl) ester (9CI) (CA INDEX NAME)

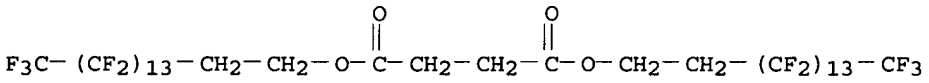


RN 444890-30-6 HCAPLUS
CN Butanedioic acid, bis(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluorotetradecyl) ester (9CI) (CA INDEX

NAME)



RN 444890-31-7 HCAPLUS
CN Butanedioic acid, bis(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafluorohexadecyl) ester (9CI) (CA INDEX NAME)



IC ICM D06M013-236
ICS C08K005-00; C08L027-12; C08L033-16; C08L101-00; C09K003-00; D06M015-277; D06M015-295; D06M015-576
CC 40-9 (Textiles and Fibers)
Section cross-reference(s): 42
ST perfluoroalkyl butanedioate **antisoiling** coating nylon carpet; **water repellency** perfluoroalkyl butanedioate **antisoiling** coating **fiber**; **oil repellency** perfluoroalkyl butanedioate **antisoiling** coating **fiber**
IT Fluoropolymers, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic; **antisoiling** coating compns. for **fiber** products)
IT **Coating materials**
(**antisoiling**, water-resistant; **antisoiling** coating compns. for **fiber** products)
IT Polyamide **fibers**, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(carpets; **antisoiling** coating compns. for **fiber** products)
IT **Coating materials**
(oil-resistant; **antisoiling** coating compns. for **fiber** products)
IT Carpets
(pile; **antisoiling** coating compns. for)
IT 9011-14-7P, Methyl methacrylate homopolymer
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**antisoiling** coating compns. for **fiber** products)
IT **112-92-5DP**, Stearyl alcohol, reaction products with HDI trimer and perfluoroalkyl alcs. **647-42-7DP**, reaction products with HDI trimer, perfluoroalkyl alcs., and stearyl alc. **678-39-7DP**, reaction products with HDI trimer, perfluoroalkyl alcs., and stearyl alc. **865-86-1DP**, reaction products with HDI trimer, perfluoroalkyl alcs., and stearyl alc. 28574-90-5DP, Hexamethylene diisocyanate trimer, reaction products with perfluoroalkyl alcs. and stearyl alc. **39239-77-5DP**, reaction products with HDI trimer, perfluoroalkyl alcs., and stearyl alc. **60699-51-6DP**, reaction products with HDI trimer, perfluoroalkyl alcs., and stearyl alc. 110539-63-4DP, Sumidur N 3200, reaction products with perfluoroalkyl alcs. and stearyl alc. **444890-32-8P** **444890-33-9P**

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**antisoiling** coating compns. for **fiber** products)

IT **49676-48-4 261928-47-6 444890-28-2 444890-29-3 444890-30-6 444890-31-7**
RL: TEM (Technical or engineered material use); USES (Uses)
(**antisoiling** coating compns. for **fiber** products)

L114 ANSWER 14 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:368721 HCAPLUS
DOCUMENT NUMBER: 136:387741
TITLE: Alkylated fluorochemical oligomers and use thereof in the treatment of fibrous substrates
INVENTOR(S): Jariwala, Chetan P.; Eggleston, James D.; Yandrasits, Michael A.; Dams, Rudolf J.; Coppens, Dirk M.
PATENT ASSIGNEE(S): 3M Innovative Properties Company, USA
SOURCE: PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002038850	A2	20020516	WO 2001-US46983	2001 1106
WO 2002038850	A3	20030103		
W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 6525127	B1	20030225	US 2000-708372	2000 1108
AU 2002032513	A5	20020521	AU 2002-32513	2001 1106
EP 1356153	A2	20031029	EP 2001-992037	2001 1106
EP 1356153	B1	20040804		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
AT 272738	E	20040815	AT 2001-992037	2001 1106
US 2004024262	A1	20040205	US 2003-399415	2003 0417
PRIORITY APPLN. INFO.:			US 2000-708372 A	2000 1108

US 1999-309836 A2 1999 0511

WO 2001-US46983 W 2001 1106

AB This invention provides a method of treating fibrous substrates, such as leather, by contacting the substrate with a fluorochem. compound comprising: a fluorochem. oligomeric portion comprising an aliphatic backbone with a plurality of pendant fluoroaliph. groups, each fluoroaliph. group having a fully fluorinated terminal group and each independently linked to a carbon atom of the aliphatic backbone through an organic linking group; an aliphatic moiety; and a linking group which links the fluorochem. oligomeric portion to the aliphatic moiety. The fluorochem. compds. provide desirable oil, water and stain repellency to fibrous substrates.

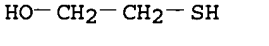
IT **306997-46-6DP**, C40-48-fatty acid esters
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(alkylated fluorochem. oligomers and use thereof in the treatment of fibrous substrates)

RN 306997-46-6 HCAPLUS

CN 2-Propenoic acid, 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl ester, telomer with 2-mercaptoethanol (9CI) (CA INDEX NAME)

CM 1

CRN 60-24-2
CMF C2 H6 O S

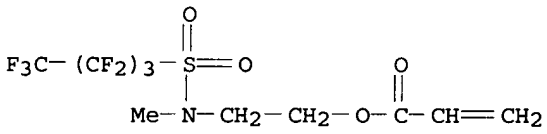


CM 2

CRN 306997-45-5
CMF (C10 H10 F9 N O4 S)x
CCI PMS

CM 3

CRN 67584-55-8
CMF C10 H10 F9 N O4 S



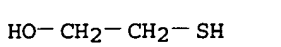
IT **306997-46-6P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(alkylated fluorochem. oligomers and use thereof in the treatment of fibrous substrates)

RN 306997-46-6 HCAPLUS

CN 2-Propenoic acid, 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl ester, telomer with 2-mercaptoethanol (9CI) (CA INDEX NAME)

CM 1

CRN 60-24-2
CMF C2 H6 O S

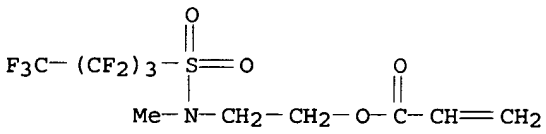


CM 2

CRN 306997-45-5
CMF (C10 H10 F9 N O4 S)x
CCI PMS

CM 3

CRN 67584-55-8
CMF C10 H10 F9 N O4 S



IC ICM D06M015-277
ICS D06M013-156; D06M013-265
CC 46-4 (Surface Active Agents and Detergents)
Section cross-reference(s): 40
IT **306997-46-6DP**, C40-48-fatty acid esters 306997-47-7DP, C40-48-fatty acid esters 307497-48-9P 425664-28-4P 425664-30-8P 425664-32-0P 425664-34-2P 425664-36-4P 425664-38-6P 425664-40-0P 425664-42-2P 425664-44-4P 425664-46-6P 425664-48-8P 425664-50-2P 425664-52-4P 425664-54-6P 425669-05-2P 425669-06-3P 425669-07-4P 425669-08-5P 425669-09-6P 425669-10-9P 425669-11-0P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(alkylated fluorochem. oligomers and use thereof in the treatment of fibrous substrates)
IT **306997-46-6P** 306997-47-7P 307335-82-6P 425664-20-6P 425664-21-7P 425664-22-8P 425664-25-1P 425664-26-2P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(alkylated fluorochem. oligomers and use thereof in the treatment of fibrous substrates)

L114 ANSWER 15 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:453037 HCAPLUS
DOCUMENT NUMBER: 135:62685
TITLE: Fluoroalkyl triazine compounds and use as **water repellent**
INVENTOR(S): Clark, Gregory D.; Behr, Frederick E.; Roberts, Gary P.; Vander Louw, Steven J.; Hall, Gregory K. E.
PATENT ASSIGNEE(S): 3M Innovative Properties Co., USA
SOURCE: PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001044209	A1	20010621	WO 2000-US30598	20001107
W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6391948	B1	20020521	US 1999-461153	19991214
PRIORITY APPLN. INFO.:			US 1999-461153 A	19991214

OTHER SOURCE(S): MARPAT 135:62685

AB The invention describes fluorochem. triazine compds., compns. containing the fluorochem. triazine compds., the process for preparing the fluorochem. compds. and compns., substrates treated with the fluorochem. compds., melt extrusion of **fibers** and films containing the fluorochem. compds. and compns., and coating, polish and marine antifouling compns. to provide oil and **water repellency** to substrates.

IT **507-63-1P**, Perfluorooctyl iodide **2043-53-0P**, 2-(Perfluorooctyl)ethyl iodide
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(fluoroalkyl triazine compds. and use as **water repellent**)

RN 507-63-1 HCAPLUS

CN Octane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptadecafluoro-8-iodo- (9CI) (CA INDEX NAME)

$F_3C-(CF_2)_7-I$

RN 2043-53-0 HCAPLUS

CN Decane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptadecafluoro-10-iodo- (8CI, 9CI) (CA INDEX NAME)

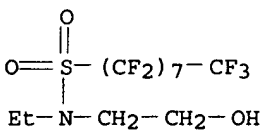
$ICH_2-CH_2-(CF_2)_7-CF_3$

IT **1691-99-2DP**, reaction products with triazine derivs. **34143-74-3DP**, reaction products with triazine derivs. **34454-97-2P 104559-01-5DP**, DESMODUR N-3300, reaction products with fluoroalkyl compds. and triazine compds.
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(fluoroalkyl triazine compds. and use as **water repellent**)

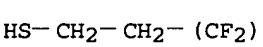
RN 1691-99-2 HCAPLUS

CN 1-Octanesulfonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-(2-hydroxyethyl)- (6CI, 7CI, 8CI, 9CI) (CA

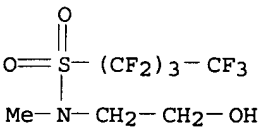
INDEX NAME)



RN 34143-74-3 HCAPLUS
CN 1-Decanethiol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro- (8CI, 9CI) (CA INDEX NAME)

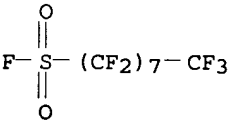


RN 34454-97-2 HCAPLUS
CN 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-(2-hydroxyethyl)-N-methyl- (9CI) (CA INDEX NAME)



RN 104559-01-5 HCAPLUS
CN Desmodur N 3300 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **307-35-7**, Perfluorooctanesulfonyl fluoride
RL: RCT (Reactant); RACT (Reactant or reagent)
(fluoroalkyl triazine compds. and use as **water repellent**)
RN 307-35-7 HCAPLUS
CN 1-Octanesulfonyl fluoride, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro- (8CI, 9CI) (CA INDEX NAME)



IC ICM C07D251-34
ICS C09D005-16; C09G001-12; C09D007-12
CC 42-5 (Coatings, Inks, and Related Products)
IT Alcohols, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(C8-12, γ-ω-perfluoro, reaction products with fluoroalkyl compds. and triazine compds.; fluoroalkyl triazine compds. and use as **water repellent**)
IT **Coating materials**
(antifouling, marine; fluoroalkyl triazine compds. and use as **water repellent**)
IT Polysiloxanes, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(di-Me, mercaptopropyl group-terminated, reaction products with

fluoroalkyl compds. and triazine compds.; fluoroalkyl triazine compds. and use as **water repellent**)

IT Aminoplasts
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(fluoroalkyl triazine compds. and use as **water repellent**)

IT Perfluoro compounds
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(γ-ω-perfluoro-C8-12 alcs., reaction products with fluoroalkyl compds. and triazine compds.; fluoroalkyl triazine compds. and use as **water repellent**)

IT **507-63-1P**, Perfluorooctyl iodide **2043-53-0P**, 2-(Perfluorooctyl)ethyl iodide
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(fluoroalkyl triazine compds. and use as **water repellent**)

IT 101-37-1P, 2,4,6-Triallyloxy-1,3,5-triazine 107-96-0P, 3-Mercaptopropionic acid 112-43-6P, ω-Undecylenylalcohol 1025-15-6DP, reaction products with fluoroalkyl compds. **1691-99-2DP**, reaction products with triazine derivs. 4420-74-0DP, reaction products with triazine derivs. **34143-74-3DP**, reaction products with triazine derivs. **34454-97-2P 104559-01-5DP**, DESMODUR N-3300, reaction products with fluoroalkyl compds. and triazine compds.
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(fluoroalkyl triazine compds. and use as **water repellent**)

IT 9003-08-1, RESIMENE 747
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(fluoroalkyl triazine compds. and use as **water repellent**)

IT 62-56-6, Thiourea, reactions 74-85-1, Ethylene, reactions **307-35-7**, Perfluorooctanesulfonyl fluoride
RL: RCT (Reactant); RACT (Reactant or reagent)
(fluoroalkyl triazine compds. and use as **water repellent**)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L114 ANSWER 16 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:848069 HCAPLUS
DOCUMENT NUMBER: 134:30135
TITLE: Water- and **oil-repellent** sheets and production methods therefor
INVENTOR(S): Yoneda, Hisao; Matsui, Mikihiro; Ikebukuro, Kazunari
PATENT ASSIGNEE(S): Kuraray Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000336348	A2	20001205	JP 1999-149607	1999 0528

PRIORITY APPLN. INFO.: JP 1999-149607
1999
0528

AB Sheets having fluoropolymers on the surface are prepared and bonded to other articles at <100° and heated at >130° after bonding. Thus,a leather substitute, namely, a polyether polyurethane-coated nylon 6 nonwoven **fabric**, having a surface layer containing Resamine ME 8115LP and poly(1,1-dihydroperfluorooctyl acrylate) was coated with an adhesive at 80°, bonded to a sole treated similarly, and heated at 140° to prepare a sports shoe.

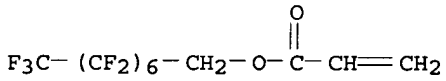
IT **26337-50-8**, Poly(1,1-dihydroperfluorooctyl acrylate)
RL: TEM (Technical or engineered material use); USES (Uses)
(coatings; water- and **oil-repellent** sheets for leather substitutes for shoes)

RN 26337-50-8 HCAPLUS

CN 2-Propenoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

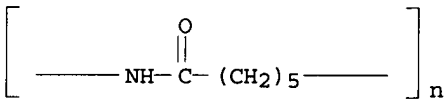
CRN 307-98-2
CMF C11 H5 F15 O2



IT **25038-54-4**, Nylon 6, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(**fibers**, nonwoven **fabric**; water- and **oil-repellent** sheets for leather substitutes for shoes)

RN 25038-54-4 HCAPLUS

CN Poly[imino(1-oxo-1,6-hexanediyl)] (9CI) (CA INDEX NAME)



IC ICM C09K003-18

CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 40

ST water **oil repellent** shoe; polyamide nonwoven **fabric** polyurethane leather substitute

IT Polyolefin **fibers**
RL: TEM (Technical or engineered material use); USES (Uses)
(ethylene; water- and **oil-repellent** sheets for leather substitutes for shoes)

IT Polyamides, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(**fibers**, nonwoven **fabric**; water- and **oil-repellent** sheets for leather substitutes for shoes)

IT **Coating materials**
(oil-resistant; water- and **oil-repellent** sheets for leather substitutes for shoes)

IT Polyurethanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polycarbonate-; water- and **oil-repellent**

sheets for leather substitutes for shoes)
IT Polyurethanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polyester-; water- and **oil-repellent**
sheets for leather substitutes for shoes)
IT Polyurethanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polyether-; water- and **oil-repellent**
sheets for leather substitutes for shoes)
IT Polycarbonates, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polyurethane-; water- and **oil-repellent**
sheets for leather substitutes for shoes)
IT Adhesion, physical
Adhesives
Leather substitutes
Nonwoven **fabrics**
Shoes
Sporting goods
(water- and **oil-repellent** sheets for
leather substitutes for shoes)
IT **Coating materials**
(water-resistant; water- and **oil-repellent**
sheets for leather substitutes for shoes)
IT **26337-50-8**, Poly(1,1-dihydroperfluorooctyl acrylate)
RL: TEM (Technical or engineered material use); USES (Uses)
(coatings; water- and **oil-repellent** sheets
for leather substitutes for shoes)
IT **25038-54-4**, Nylon 6, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(**fibers**, nonwoven **fabric**; water- and
oil-repellent sheets for leather substitutes
for shoes)
IT 9002-88-4, Polyethylene
RL: TEM (Technical or engineered material use); USES (Uses)
(**fibers**; water- and **oil-repellent**
sheets for leather substitutes for shoes)
IT 25190-06-1D, Ptmg, polyurethanes 132469-64-8, Resamine ME 8115LP
135991-65-0, Resamine ME 8105LP 150604-75-4, Desmodur RE
310901-83-8, Notape 3080
RL: TEM (Technical or engineered material use); USES (Uses)
(water- and **oil-repellent** sheets for
leather substitutes for shoes)

L114 ANSWER 17 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:814577 HCAPLUS
DOCUMENT NUMBER: 133:363857
TITLE: Polish composition containing alkylated fluoro oligomers
INVENTOR(S): Vander Louw, Steven J.; Jariwala, Chetan P.
PATENT ASSIGNEE(S): 3M Innovative Properties Company, USA
SOURCE: PCT Int. Appl., 35 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000068333	A1	20001116	WO 1999-US20065	1999 0901

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN,
CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM,

	HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6235824		B1	20010522	US 1999-309461	1999 0511
CA 2372466		AA	20001116	CA 1999-2372466	1999 0901
AU 9958003		A1	20001121	AU 1999-58003	1999 0901
EP 1183315		A1	20020306	EP 1999-945400	1999 0901
EP 1183315		B1	20040414		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002544319		T2	20021224	JP 2000-616302	1999 0901
ES 2215401		T3	20041001	ES 1999-945400	1999 0901
PRIORITY APPLN. INFO.:				US 1999-309461 A	1999 0511
				WO 1999-US20065 W	1999 0901

AB A polish composition for protecting a substrate from environmental damage comprises a base component selected from the group consisting of waxes, silicone oils, and mixts. thereof and an alkylated fluorochem. oligomer comprising: (i) a fluorochem. oligomeric portion comprising an aliphatic backbone with a plurality of fluoroaliph. groups attached thereto, each fluoroaliph. group having a fully fluorinated terminal group and each independently linked to a carbon atom of the aliphatic backbone through an organic linking group; (ii) an aliphatic moiety; and (iii) a linking group which links the fluorochem. oligomeric portion to the aliphatic moiety.

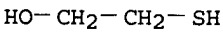
IT **306997-46-6DP**, esters with fatty acids
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polish composition containing alkylated fluoro oligomers)

RN 306997-46-6 HCAPLUS

CN 2-Propenoic acid, 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl ester, telomer with 2-mercaptoethanol (9CI) (CA INDEX NAME)

CM 1

CRN 60-24-2
CMF C2 H6 O S

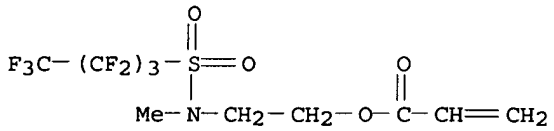


CM 2

CRN 306997-45-5
CMF (C10 H10 F9 N O4 S)x
CCI PMS

CM 3

CRN 67584-55-8
CMF C10 H10 F9 N O4 S



IC ICM C09G001-08
ICS C09G001-16
CC 42-11 (Coatings, Inks, and Related Products)
IT 107-96-0DP, 3-Mercaptopropionic acid, telomers with fluoroacrylic polymers, esters 118058-39-2DP, Unilin 425, esters with fluoro acrylic telomers 190735-24-1DP, Fluowet AC 812, telomers with mercaptopropionic acid, esters **306997-46-6DP**, esters with fatty acids 306997-47-7DP, esters with fatty acids 307299-86-1P 307299-88-3P 307299-89-4P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polish composition containing alkylated fluoro oligomers)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L114 ANSWER 18 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:814452 HCAPLUS
DOCUMENT NUMBER: 133:363131
TITLE: Alkylated fluorochemical oligomers and use thereof as repellents
INVENTOR(S): Jariwala, Chetan P.; Klun, Thomas P.; Dams, Rudolf J.; Jones, Marvin E.
PATENT ASSIGNEE(S): 3M Innovative Properties Co., USA
SOURCE: PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000068189	A1	20001116	WO 1999-US20063	19990901

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6288157	B1	20010911	US 1999-309836	1999 0511
AU 9958001	A1	20001121	AU 1999-58001	1999 0901
JP 2002544188	T2	20021224	JP 2000-617170	1999 0901

PRIORITY APPLN. INFO.: US 1999-309836 A 1999 0511

WO 1999-US20063 W 1999 0901

AB This invention provides fluorochem. compds. comprising: a fluorochem. oligomeric portion comprising an aliphatic backbone with a plurality of pendant fluoroaliph. groups, each fluoroaliph. group having a fully fluorinated terminal group and each independently linked to a carbon atom of the aliphatic backbone through an organic linking group; an aliphatic moiety; and a linking group which links the fluorochem. oligomeric portion to the aliphatic moiety. The fluorochem. compds. are useful as topical treatments for fibrous substrates such as textiles and fabrics, and as polymer melt additives to provide desirable oil-, water and stain repellency to shaped articles such as fibers.

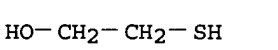
IT **306997-46-6DP**, esters with Unicid 700
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(alkylated fluorochem. oligomers and use thereof as repellents)

RN 306997-46-6 HCAPLUS

CN 2-Propenoic acid, 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl ester, telomer with 2-mercaptoethanol (9CI) (CA INDEX NAME)

CM 1

CRN 60-24-2
CMF C2 H6 O S

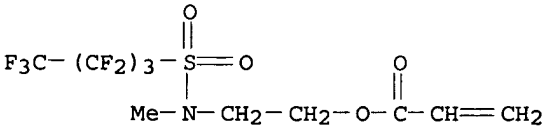


CM 2

CRN 306997-45-5
CMF (C10 H10 F9 N O4 S)x
CCI PMS

CM 3

CRN 67584-55-8
CMF C10 H10 F9 N O4 S

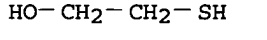


IT **306997-46-6P**

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(alkylated fluorochem. oligomers and use thereof as repellents)
RN 306997-46-6 HCAPLUS
CN 2-Propenoic acid, 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl ester, telomer with 2-mercaptoethanol (9CI) (CA INDEX NAME)

CM 1

CRN 60-24-2
CMF C2 H6 O S

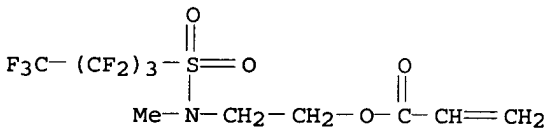


CM 2

CRN 306997-45-5
CMF (C10 H10 F9 N O4 S)x
CCI PMS

CM 3

CRN 67584-55-8
CMF C10 H10 F9 N O4 S



IC ICM C07C323-52
ICS C08K005-435; C08K005-375; D06M013-252
CC 35-4 (Chemistry of Synthetic High Polymers)
IT 272128-22-0P **306997-46-6DP**, esters with Unicid 700
306997-47-7DP, esters with Unicid 700 307299-86-1P
307299-88-3P 307299-89-4P 307335-80-4DP, esters with Unicid 700 307335-81-5DP, esters with Unicid 700 307335-83-7P
307335-84-8P 307335-86-0P 307335-88-2DP, esters with perfluoalkylsulfonamide alcs. 307335-90-6P 307335-91-7P
307497-28-5P 307497-41-2P 307497-44-5P 307497-46-7P
307497-48-9P 307497-50-3P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(alkylated fluorochem. oligomers and use thereof as repellents)
IT **306997-46-6P** 306997-47-7P 307299-85-0P 307299-87-2P
307335-79-1P 307335-80-4P 307335-81-5P 307335-82-6P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(alkylated fluorochem. oligomers and use thereof as repellents)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L114 ANSWER 19 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:628335 HCAPLUS
DOCUMENT NUMBER: 133:224218
TITLE: Surface-treating agents for carpet fibers comprising metal alkoxides, fluorine-containing compounds having functional groups reactable with metal

alkoxides and polymers having functional groups reactable with fibers for improved stain blocking properties and water and oil repellency

INVENTOR(S): Sato, Kazuyuki; Morita, Masamichi; Yamaguchi, Fumihiko; Kubo, Motonobu

PATENT ASSIGNEE(S): Daikin Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000052251	A1	20000908	WO 2000-JP1170	2000 0229
W: JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 2000248464	A2	20000912	JP 1999-57100	1999 0304
EP 1167616	A1	20020102	EP 2000-905407	2000 0229
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRIORITY APPLN. INFO.:

JP 1999-57100	A	1999 0304
WO 2000-JP1170	W	2000 0229

AB The agents comprise (A) metal alkoxides, (B) F-containing compds. having functional groups reactable with A, and (C) polymers containing reactive groups reactable with the treatment materials, and carpet fibers treated with the agents show stain blocking rating (AATCC TM-175-1993) ≥8 and Knoop surface hardness (KH) ≥5. Thus, 15 parts [3-(methacryloyloxy)propyl]trimethoxysilane was copolymd. with tetraethoxysilane 15, poly(methacrylic acid) (FX-668F) 15, (heptadecafluoro-1,1,2,2-tetrahydrodecyl)triethoxysilane 1.5, and Me methacrylate 5 parts to give a copolymer (I). A nylon pile carpet was spray coated with a solution (solids 3%) containing I 90, benzoin Me ether 0.75, and N,N-methylenebisacrylamide 4 parts and MeOH and exposed to UV rays for 10 min to give a carpet exhibiting water resistance [maximum iso-PrOH content (in volume%) of an aqueous drop containing iso-PrOH for retention of shape of the drop for 3 min] 50, oil repellency rating (AATCC TM-118-1966) 3, stain blocking rating 10, and soiling resistance (AATCC TM-123-1995) 80% and exhibiting Knoop hardness 22.

IT **291536-66-8P**, Methacrylic acid-[3-(methacryloyloxy)propyl]trimethoxysilane-methyl methacrylate-tetraethoxysilane copolymer ester with 2-(perfluorooctyl)ethanol, polymer with N,N-methylenebisacrylamide **292139-01-6P**, (Heptadecafluoro-1,1,2,2-tetrahydrodecyl)triethoxysilane-methacrylic acid-[3-(methacryloyloxy)propyl]trimethoxysilane-methyl methacrylate-N,N-methylenebisacrylamide-tetraethoxysilane copolymer

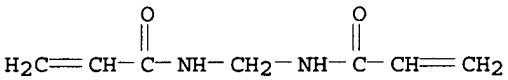
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(finishes for carpet fibers comprising metal alkoxides, fluorine-containing compds. having functional groups reactable with metal alkoxides and polymers having functional groups reactable with fibers for improved stain blocking properties)

RN 291536-66-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with methyl 2-methyl-2-propenoate, silicic acid (H4SiO4) tetraethyl ester and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl ester, polymer with N,N'-methylenebis[2-propenamide] (9CI) (CA INDEX NAME)

CM 1

CRN 110-26-9
CMF C7 H10 N2 O2

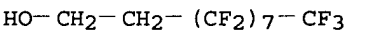


CM 2

CRN 291536-65-7
CMF (C10 H20 O5 Si . C8 H20 O4 Si . C5 H8 O2 . C4 H6 O2)x . x C10 H5 F17 O

CM 3

CRN 678-39-7
CMF C10 H5 F17 O

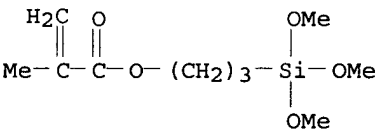


CM 4

CRN 291536-64-6
CMF (C10 H20 O5 Si . C8 H20 O4 Si . C5 H8 O2 . C4 H6 O2)x
CCI PMS

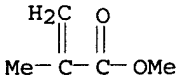
CM 5

CRN 2530-85-0
CMF C10 H20 O5 Si



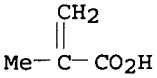
CM 6

CRN 80-62-6
CMF C5 H8 O2



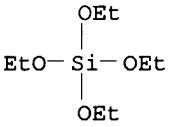
CM 7

CRN 79-41-4
CMF C4 H6 O2



CM 8

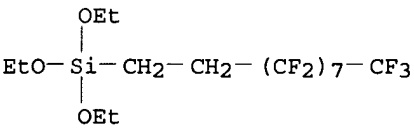
CRN 78-10-4
CMF C8 H20 O4 Si



RN 292139-01-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with N,N'-methylenebis[2-propenamide], methyl 2-methyl-2-propenoate, silicic acid (H4SiO4) tetraethyl ester, triethoxy(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)silane and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

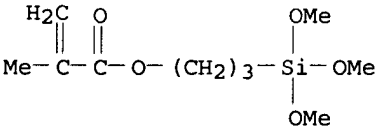
CM 1

CRN 101947-16-4
CMF C16 H19 F17 O3 Si



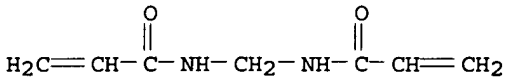
CM 2

CRN 2530-85-0
CMF C10 H20 O5 Si



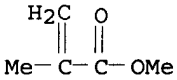
CM 3

CRN 110-26-9
CMF C7 H10 N2 O2



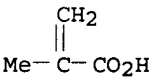
CM 4

CRN 80-62-6
CMF C5 H8 O2



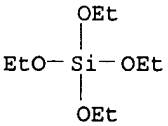
CM 5

CRN 79-41-4
CMF C4 H6 O2



CM 6

CRN 78-10-4
CMF C8 H20 O4 Si



IC ICM D06M013-144
CC 40-9 (Textiles and **Fibers**)
IT **291536-66-8P**, Methacrylic acid-[3-(methacryloyloxy)propyl]trimethoxysilane-methyl methacrylate-tetraethoxysilane copolymer ester with 2-(perfluorooctyl)ethanol, polymer with N,N-methylenebisacrylamide
292139-01-6P, (Heptadecafluoro-1,1,2,2-tetrahydrodecyl)triethoxysilane-methacrylic acid-[3-(methacryloyloxy)propyl]trimethoxysilane-methyl methacrylate-N,N-methylenebisacrylamide-tetraethoxysilane copolymer
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(finishes for carpet fibers comprising metal alkoxides, fluorine-containing compds. having functional groups reactable with

metal alkoxides and polymers having functional groups reactable with fibers for improved stain blocking properties)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

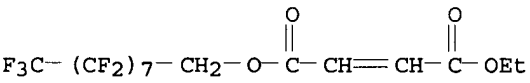
L114 ANSWER 20 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:300961 HCAPLUS
DOCUMENT NUMBER: 132:341202
TITLE: Oil-based ink-jet printing ink composition for statically ink-attracting mode printing and method for printing using same
INVENTOR(S): Nakasawa, Yusuke; Kato, Eiichi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000129181	A2	20000509	JP 1998-307290	1998 1028
PRIORITY APPLN. INFO.:			JP 1998-307290	1998 1028

AB In the oil-based ink-jet printing ink composition, which is used for statically ink-attracting mode printing, having dispersed 0.1-3 μm particles in a non-aqueous solution of ≥109 Ωcm resistance and of ≤3.5 dielec. constant, the composition has 0.05-5 % of a fluoro surfactant which is soluble in the non-aqueous solvent. The addition of the fluoro surfactant in the composition provides the stable ink-emitting and the excellent image quality.
IT **267401-96-7**
RL: TEM (Technical or engineered material use); USES (Uses)
(7fluoro surfactant in ink-jet printing composition)
RN 267401-96-7 HCAPLUS
CN 2-Butenedioic acid, ethyl 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptadecafluorononyl ester, polymer with 1-octadecene (9CI) (CA INDEX NAME)

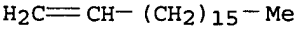
CM 1

CRN 267401-95-6
CMF C15 H9 F17 O4



CM 2

CRN 112-88-9
CMF C18 H36



IT **267401-97-8**
RL: TEM (Technical or engineered material use); USES (Uses)
(fluoro surfactant in ink-jet printing composition)
RN 267401-97-8 HCAPLUS
CN Octadecane, 1-(ethenyloxy)-, polymer with 8-(ethenyloxy)-1,1,1,2,2,3,3,4,4,5,5,6,6,7,7-pentadecafluorooctane (9CI) (CA INDEX NAME)

CM 1

CRN 29414-42-4
CMF C10 H5 F15 O

$H_2C{=}CH{-}O{-}CH_2{-}(CF_2)_6{-}CF_3$

CM 2

CRN 930-02-9
CMF C20 H40 O

$H_2C{=}CH{-}O{-}(CH_2)_{17}{-}Me$

IC ICM C09D011-00
ICS B41M005-00
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 42
IT **267401-96-7**
RL: TEM (Technical or engineered material use); USES (Uses)
(7fluoro surfactant in ink-jet printing composition)
IT 29403-97-2 88992-72-7, Lauryl methacrylate-heptadecafluorooctylethyl methacrylate copolymer 114453-80-4, SURFLON SC105 182883-73-4, MEGAFAC F178A 267401-90-1 267401-91-2 267401-92-3 267401-93-4 267401-94-5 **267401-97-8** 267411-43-8
RL: TEM (Technical or engineered material use); USES (Uses)
(fluoro surfactant in ink-jet printing composition)

L114 ANSWER 21 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:34670 HCAPLUS
DOCUMENT NUMBER: 132:86022
TITLE: Optical recording material
INVENTOR(S): Ono, Toshitsugu; Kondo, Hirofumi; Sakamoto, Tetsuhiro
PATENT ASSIGNEE(S): Sony Corporation, Japan
SOURCE: Eur. Pat. Appl., 30 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 971344	A1	20000112	EP 1999-113267	1999 0708

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

JP 2000082236 A2 20000321 JP 1998-311473 1998 1030

PRIORITY APPLN. INFO.: JP 1998-194537 A 1998 0709

JP 1998-311473 A 1998 1030

OTHER SOURCE(S): MARPAT 132:86022

AB An optical recording material comprises, on a substrate, a recording layer, a light-permeable layer, and a surface layer comprising a carboxylic acid amine salt represented by the formula (RCO2-)n[HN+(R1)(R2)]nR3 or R4CO2-R5N+R6R7R8 wherein R is a perfluoroalkyl group having 3 or more carbon atoms; n = an integer of 1-3; each of R1 and R2 is H or a hydrocarbon group; R3 is a hydrocarbon group; at least one of R4 and R6 is a perfluoroalkyl group having 3 or more carbon atoms; and at least one of R4-8 is a hydrocarbon group having 12 or more carbon atoms and the rest of them are H or hydrocarbon groups.

IT **254103-84-9 254103-85-0**
RL: TEM (Technical or engineered material use); USES (Uses)
(optical recording materials with surface layers of)

RN 254103-84-9 HCAPLUS

CN 17-Octadecenoic acid, compd. with 12,12,13,13,14,14,15,15,16,16,17,17,18,18,18-pentadecafluoro-1-octadecanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 19307-16-5
CMF C18 H34 O2

$H_2C{=}CH{-}(CH_2)_{15}{-}CO_2H$

CM 2

CRN 10496-29-4
CMF C18 H24 F15 N

$H_2N{-}(CH_2)_{11}{-}(CF_2)_6{-}CF_3$

RN 254103-85-0 HCAPLUS

CN 15-Hexadecenoic acid, compd. with 12,12,13,13,14,14,15,15,16,16,17,17,18,18,19,19,19-heptadecafluoro-1-nonadecanamine (1:1) (9CI) (CA INDEX NAME)

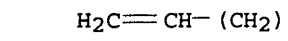
CM 1

CRN 129749-49-1
CMF C19 H24 F17 N

$H_2N{-}(CH_2)_{11}{-}(CF_2)_7{-}CF_3$

CM 2

CRN 4675-57-4
CMF C16 H30 O2



IC ICM G11B007-24
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 120302-37-6 120302-39-8 120302-44-5 120302-46-7
120302-47-8 120302-48-9 254103-72-5 254103-73-6
254103-74-7 254103-75-8 254103-76-9 254103-77-0
254103-78-1 254103-80-5 254103-82-7 254103-83-8
254103-84-9 254103-85-0
RL: TEM (Technical or engineered material use); USES (Uses)
(optical recording materials with surface layers of)
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

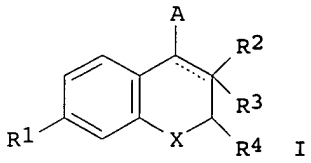
L114 ANSWER 22 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:811229 HCAPLUS
DOCUMENT NUMBER: 132:49886
TITLE: Preparation of benzopyran and benzothiopyran derivatives with antiestrogenic activity
INVENTOR(S): Jo, Jae Chon; Lim, Hyun Suk; Kim, Jong Min; Kim, Ju Su; Morikawa, Kazumi; Kanbe, Yoshitake; Kim, Myung Hwa; Nishimoto, Masahiro
PATENT ASSIGNEE(S): C & C Research Laboratories, S. Korea
SOURCE: PCT Int. Appl., 457 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9965893	A1	19991223	WO 1999-KR300	1999 0614
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
KR 2000001793	A	20000115	KR 1998-22212	1998 0613
CA 2334634	AA	19991223	CA 1999-2334634	1999 0614
AU 9941719	A1	20000105	AU 1999-41719	1999 0614
AU 756589	B2	20030116		
EP 1087959	A1	20010404	EP 1999-925450	1999 0614
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,				

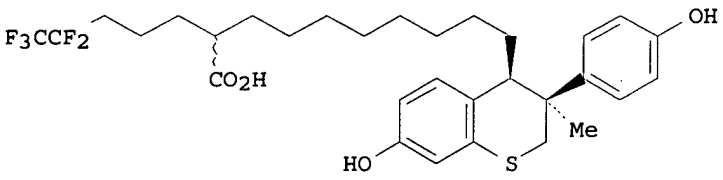
MC, PT, IE, FI				
JP 2002529372	T2	20020910	JP 2000-554718	1999 0614
NO 2000006293	A	20010213	NO 2000-6293	2000 1211
KR 2001052755	A	20010625	KR 2000-714048	2000 1211
US 6645951	B1	20031111	US 2001-719608	2001 0716
US 2004102479	A1	20040527	US 2003-640696	2003 0812
PRIORITY APPLN. INFO.:			KR 1998-22212 A	1998 0613
			WO 1999-KR300 W	1999 0614
			US 2001-719608 A3	2001 0716

OTHER SOURCE(S): MARPAT 132:49886

GI



I



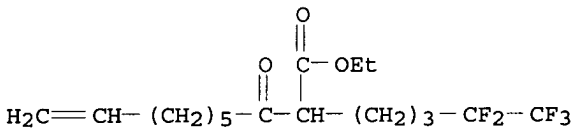
II

AB Title compds. (I) [where X = O or S; R1 = H, OH, acyloxy, or alkoxy; R2 = (un)substituted Ph, (un)substituted amino, or a 5- or 6-membered unsatd. heterocycle containing N, O, or S; R3 = null, H, or alkyl; R4 = H or alkyl, A = H, hydroxyalkyl, carboxyalkyl, carboxyvinylphenyl, pyrrole substituted by carboxyvinylbenzyl, etc.] were prepared for use in the treatment breast cancer. Examples include over 70 syntheses and 3 bioassays. For example, II was prepared by a 14-step sequence involving: (1-2) a 2-step synthesis of 8-(t-butyldimethylsilyloxy)-1-octyne, (3) 4-alkynation of 7-methoxy-3-(4-methoxyphenyl)-3-methylthiochroman-4-one with the octyne (99.3%), (4) reduction of the 4-hydroxy group by NaBH4 in the presence of ZnI2 followed by hydrogenation of the alkyne by Pd/C (50.5%), (5) desilylation (93%), (6) O-mesylation (97.7%), (7) iodation of the mesylate (93.6%), (8-10) 3-step

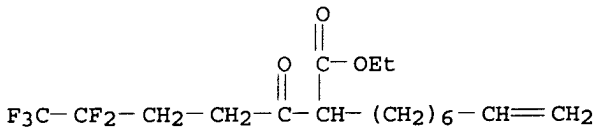
synthesis of di-Et 2-(4,4,5,5,5-pentafluoropentyl)propane-1,3-dioate, (11) addition of the di-Et malonate derivative to the 8-iodooctylthiochroman (95.9%), (12) deesterification, (13) decarboxylation (82.1%), and (14) deprotection of the OH groups (88.7%). The MCF-7 cell growth inhibiting activities of representative invention compds. varied widely [IC50 = 54.5 nM to 4993 nM compared with IC50 = 77 nM (trans) and 9.2 nM (cis) for the known antiestrogenic compound ZM 189154]. The antiestrogenic activities of I (oral administration) in ovariectomized mice were comparable or superior to ZM 189154.

IT **252948-84-8P 252948-91-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of benzopyran and benzothiopyran derivs. with antiestrogenic activity for the treatment of breast cancer)

RN 252948-84-8 HCAPLUS
CN 9-Decenoic acid, 3-oxo-2-(4,4,5,5,5-pentafluoropentyl)-, ethyl ester (9CI) (CA INDEX NAME)



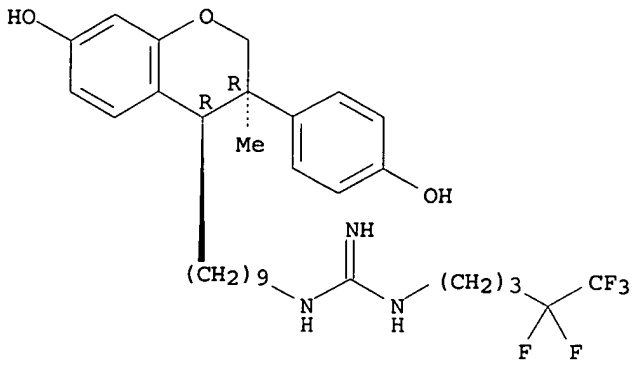
RN 252948-91-7 HCAPLUS
CN 9-Decenoic acid, 2-(4,4,5,5,5-pentafluoro-1-oxopentyl)-, ethyl ester (9CI) (CA INDEX NAME)



IT **252945-11-2P 252945-19-0P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(target compound; preparation of benzopyran and benzothiopyran derivs. with antiestrogenic activity for the treatment of breast cancer)

RN 252945-11-2 HCAPLUS
CN Guanidine, N-[9-[(3R,4R)-3,4-dihydro-7-hydroxy-3-(4-hydroxyphenyl)-3-methyl-2H-1-benzopyran-4-yl]nonyl]-N'-(4,4,5,5,5-pentafluoropentyl)-, monohydrochloride, rel- (9CI) (CA INDEX NAME)

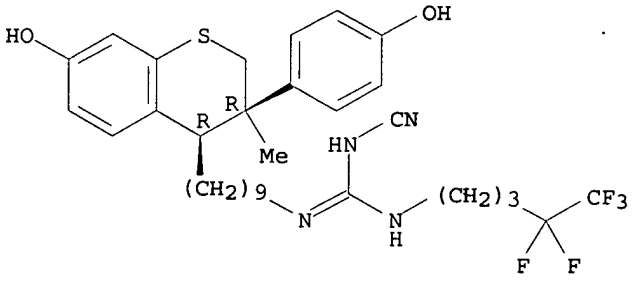
Relative stereochemistry.



● HCl

RN 252945-19-0 HCAPLUS
CN Guanidine, N-cyano-N'-[9-[(3R,4R)-3,4-dihydro-7-hydroxy-3-(4-hydroxyphenyl)-3-methyl-2H-1-benzothiopyran-4-yl]nonyl]-N''-(4,4,5,5,5-pentafluoropentyl)-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IC ICM C07D311-84
ICS C07D407-04; C07D405-04; C07D409-04; C07D413-04; A61K031-35
CC 27-15 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): 1
IT 252948-51-9P 252948-52-0P 252948-53-1P 252948-54-2P
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252949-51-2P 252949-52-3P 252949-53-4P 252949-54-5P
252949-55-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP
(Preparation); RACT (Reactant or reagent)
(intermediate; preparation of benzopyran and benzothiopyran derivs.
with antiestrogenic activity for the treatment of breast
cancer)

IT 209325-21-3P 252944-39-1P 252944-41-5P 252944-42-6P
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RL: BAC (Biological activity or effector, except adverse); BSU
(Biological study, unclassified); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation);
USES (Uses)
(target compound; preparation of benzopyran and benzothiopyran derivs.
with antiestrogenic activity for the treatment of breast
cancer)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE
FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

L114 ANSWER 23 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:439776 HCAPLUS
DOCUMENT NUMBER: 131:103485
TITLE: Fire-resistant, antifungus, and water-repellent polyester fibers and its production
INVENTOR(S): Ikeyama, Seimi; Amano, Jirou
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

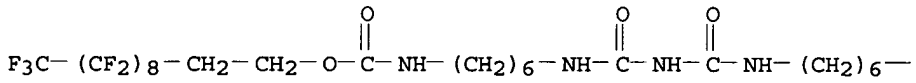
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11189977	A2	19990713	JP 1997-354763	1997 1224
JP 3580110	B2	20041020		
PRIORITY APPLN. INFO.:			JP 1997-354763	1997 1224

AB The title fibers are prepared by treating polyester fibers [e.g., of PET, poly(butylene terephthalate)] with linear or cyclic amino- and/or phenoxy-containing phosphazene compds. (e.g., 1,1-diamino-3,3,5,5-tetraphenoxy cyclotriphosphazene) to have solid pick up 1.5-10%, then treating with benzimidazole derivs. (e.g., 2-methoxycarbonylamino benzimidazole) and polyfluoroalkyl-containing urethane compds. [e.g., HN[CONH(CH2)6NHCO2CH2CH2C9F19]2] to have solids content 0.1-5 and 0.1-5%, resp.

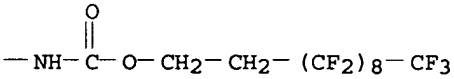
IT **230967-86-9**
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(water-repellent agents; fire-resistant polyester fibers with antifungus and water repellent properties and production)

RN 230967-86-9 HCAPLUS
CN 2,9,11,13,20-Pentaazaeicosanedioic acid, 10,12-dioxo-, bis(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-nonadecafluoroundecyl) ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM D06M015-564
ICS D06M013-44; D06M013-473
CC 40-9 (Textiles and **Fibers**)

Section cross-reference(s): 5
IT 51-79-6D, Urethane, derivs., perfluoroalkyl group containing
230967-86-9
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(water-repellent agents; fire-resistant polyester fibers with antifungus and water repellent properties and production)

L114 ANSWER 24 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:96419 HCAPLUS
DOCUMENT NUMBER: 130:169048
TITLE: High temperature-stable fluorochemicals as hydrophobic and oleophobic additives for synthetic organic polymers
INVENTOR(S): Klun, Thomas P.; Gasper, Alton J.; Temperante, John A.
PATENT ASSIGNEE(S): Minnesota Mining and Manufacturing Company, USA
SOURCE: PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

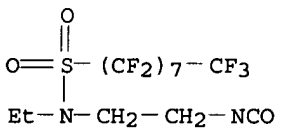
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9905345	A1	19990204	WO 1997-US22227	19971205
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 6127485	A	20001003	US 1997-901363	19970728
CA 2297145	AA	19990204	CA 1997-2297145	19971205
AU 9853727	A1	19990216	AU 1998-53727	19971205
EP 1000184	A1	20000517	EP 1997-950832	19971205
EP 1000184	B1	20030820		
R: DE, FR, GB, IT, NL, SE				
JP 2001511477	T2	20010814	JP 2000-504310	19971205
US 6262180	B1	20010717	US 2000-609191	20000630
HK 1028796	A1	20040716	HK 2000-106965	20001101
PRIORITY APPLN. INFO.:			US 1997-901363 A	19970728

WO 1997-US22227 W 1997 1205

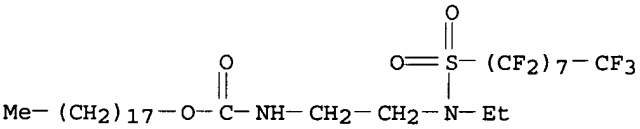
AB [(Rf)nQOCO]pA, [(Rf)nQCO2]pA', [(Rf)nQNRCO]pA, and [(Rf)nQCONR]A' [Rf = fluoroalkyl, Q = divalent or trivalent linking group where the divalent linking group may be a covalent bond, R = H or (substituted) alkyl, A = mono- or polyfunctional carboxylic acid residue, A' = residue of a mono- or polyfunctional alc. or amine, A or A' contain ≥34 C atoms with Q = CH2CH2, n = 1 or 2, p = 1,2, or many, up to the valency of A or A'] are useful as heat-resistant hydrophobic and oleophobic additives for polymers in the manufacture of films, moldings, and fibers. A typical additive was manufactured by heating Empol 1008 57.8, C8F17SO2NMeCH2CH2OH 100, p-toluenesulfonic acid 1, and PhMe 50 g 18 h at 150°.

IT **220254-71-7DP**, urethanes with fluoro alcs.
220254-73-9P 220254-75-1P 220254-77-3P
220254-79-5P 220254-82-0P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(high temperature-stable fluorochems. as hydrophobic and oleophobic additives for synthetic organic polymers)

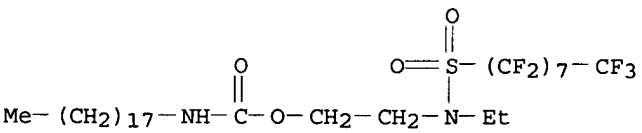
RN 220254-71-7 HCAPLUS
CN 1-Octanesulfonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-(2-isocyanatoethyl)- (9CI) (CA INDEX NAME)



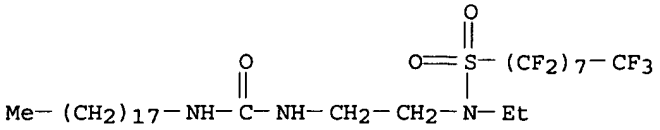
RN 220254-73-9 HCAPLUS
CN Carbamic acid, [2-[ethyl[(heptadecafluorooctyl)sulfonyl]amino]ethyl]-, octadecyl ester (9CI) (CA INDEX NAME)



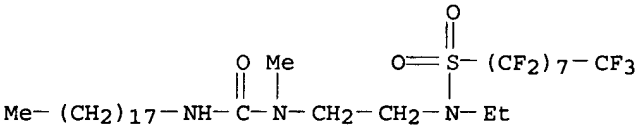
RN 220254-75-1 HCAPLUS
CN Carbamic acid, octadecyl-, 2-[ethyl[(heptadecafluorooctyl)sulfonyl]amino]ethyl ester (9CI) (CA INDEX NAME)



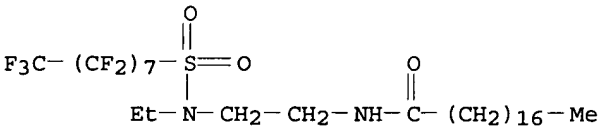
RN 220254-77-3 HCAPLUS
CN 1-Octanesulfonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-[2-[[(octadecylamino)carbonyl]amino]ethyl]- (9CI) (CA INDEX NAME)



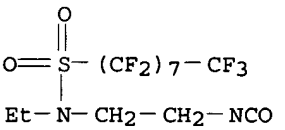
RN 220254-79-5 HCAPLUS
CN 1-Octanesulfonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-[2-[methyl[(octadecylamino)carbonyl]amino]ethyl]- (9CI) (CA INDEX NAME)



RN 220254-82-0 HCAPLUS
CN Octadecanamide, N-[2-[ethyl[(heptadecafluorooctyl)sulfonyl]amino]ethyl]- (9CI) (CA INDEX NAME)



IT **220254-71-7P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(precursor; high temperature-stable fluorochems. as hydrophobic and oleophobic additives for synthetic organic polymers)
RN 220254-71-7 HCAPLUS
CN 1-Octanesulfonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-(2-isocyanatoethyl)- (9CI) (CA INDEX NAME)



IC ICM D01F001-10
ICS C08J005-18; C08K005-10; C08K005-20; D04H001-42; B32B027-18
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): **40**
IT 110-15-6DP, Butanedioic acid, esters with fluoro alcs., preparation 112-76-5DP, Stearoyl chloride, esters with fluoro alcs. 112-96-9DP, Stearyl isocyanate, oxazolidinones with fluorosulfonamidohydroxychloroethane 124-04-9DP, Adipic acid, esters with fluoro alcs. 143-07-7DP, Dodecanoic acid, esters with fluoro alcs., preparation 822-06-0DP, HDI, oxazolidinones with fluorosulfonamidohydroxychloroethane 2991-50-6DP, esters with dimer fatty diols 2991-51-7DP, esters with dimer fatty diols 13406-91-2DP, amides with dimer acid dichlorides 24448-09-7DP, esters with fatty acid dimers 52907-69-4DP, Empol 1043, esters with fluoro alcs. 75518-90-0DP, oxazolidinones with stearyl isocyanate 97745-64-7P 127290-22-6DP, Pripol 1009, esters with fluoro alcs. 139948-97-3DP, Pripol 1004, esters with

fluoro alcs. 150872-29-0DP, Empol 1008, esters with fluoro alcs. 160676-67-5P 160676-71-1P 160676-72-2P 179799-99-6DP, Empol 1070, esters with fluoro carboxylic acids 204019-28-3DP, Empol 1075, urethanes with fluoro isocyanates 220254-52-4P 220254-54-6P 220254-56-8P 220254-59-1DP, esters with dimer fatty diols 220254-61-5P 220254-63-7P 220254-65-9P 220254-67-1P 220254-69-3P **220254-71-7DP**, urethanes with fluoro alcs. **220254-73-9P 220254-75-1P 220254-77-3P 220254-79-5P 220254-82-0P** 220254-84-2DP, amides with dimer acid dichlorides 220254-86-4P 220254-94-4P 220319-04-0P 220319-06-2P 220355-91-9DP, Kemamine DP 3695, reaction products with fluoro epoxides
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(high temperature-stable fluorochems. as hydrophobic and oleophobic additives for synthetic organic polymers)

IT 24448-09-7P 220254-59-1P **220254-71-7P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(precursor; high temperature-stable fluorochems. as hydrophobic and oleophobic additives for synthetic organic polymers)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L114 ANSWER 25 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:784179 HCAPLUS
DOCUMENT NUMBER: 128:96751
TITLE: Lubricating succinic acid derivatives and magnetic recording material using them
INVENTOR(S): Furuya, Takahiro; Miyata, Kazushi
PATENT ASSIGNEE(S): Hitachi Maxell, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09316031	A2	19971209	JP 1996-128466	19960523

PRIORITY APPLN. INFO.: JP 1996-128466 19960523

OTHER SOURCE(S): MARPAT 128:96751
AB R2O2CCHR1CH2CO2-N+HR3R4 (I; R1 = H, nonfluorinated block; R2 = fluorinated or nonfluorinated block; R3-4 = H, fluorinated or nonfluorinated block) are claimed as lubricating materials. The magnetic recording material has a magnetic layer on one side or both sides of a nonmagnetic support, and inside or surface of the magnetic layer contains I. I decrease friction between 2 solid surfaces in sliding against each other, thus the recording material using I has good durability and running property. I are also useful for paints, water- and oil-proofing agents for fibers, mold releases, leveling agents, adhesives, antifoaming agents, lenses, etc.

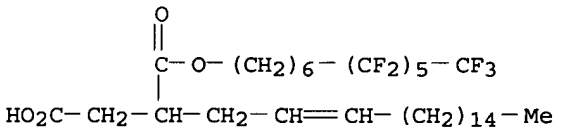
IT **201155-06-8P**
RL: DEV (Device component use); PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(preparation of succinic acid derivs. as lubricating agents and magnetic recording material using them)

RN 201155-06-8 HCAPLUS
CN Butanedioic acid, 2-octadecenyl-, 1-(7,7,8,8,9,9,10,10,11,11,12,12,12-tridecafluorododecyl) ester, compd. with 1-octadecanamine (1:1) (9CI) (CA INDEX NAME)

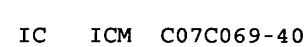
CM 1

CRN 201155-05-7
CMF C34 H51 F13 O4



CM 2

CRN 124-30-1
CMF C18 H39 N



IC ICM C07C069-40
ICS C07C069-63; C07C211-03; C07C211-15; C07C217-08; C10M105-36; C10M105-54; C10M105-60; G11B005-71; C10N030-06; C10N040-14; C10N050-08
CC 77-8 (Magnetic Phenomena)
Section cross-reference(s): 51
IT 201154-96-3P 201154-98-5P 201154-99-6P 201155-01-3P 201155-02-4P 201155-04-6P **201155-06-8P** 201155-08-0P 201155-10-4P 201155-12-6P
RL: DEV (Device component use); PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation of succinic acid derivs. as lubricating agents and magnetic recording material using them)

L114 ANSWER 26 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:180696 HCAPLUS
DOCUMENT NUMBER: 126:173146
TITLE: Tricarbonyl group-containing fluoropolymers and surface treating agents based on them for metals
INVENTOR(S): Tsuchida, Katsuyuki; Kumagai, Masashi
PATENT ASSIGNEE(S): Japan Enajii Kk, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09003128	A2	19970107	JP 1995-151701	1995 0619

PRIORITY APPLN. INFO.: JP 1995-151701
1995
0619

AB Title agents giving corrosion resistance, water and oil repellency for metals (especially, Cu, steel, Al), are based on (A) tricarbonyl group-containing fluoropolymers having repeating units CH2CH[R3OzCOCH(COOxR1)(COOyR2)] [including their enol forms; R1, R2 = (F-substituted) C1-10 alkyl, R1 and/or R2 = F-substituted alkyl; R3 = single bond, C1-8 alkylene; x, y, z = 0, 1], (B) homopolymer of R2OyCOCH(COOxR1)COOzR4 [I; including their enol forms; R1, R2, R4 = (F-substituted) C1-10 alkyl, double bond-terminated C2-10 alkenyl, at least one of them is the alkenyl group and at least one of the other is the F-substituted alkyl group; x, y, z = 0, 1], or (C) copolymers manufactured from I and vinyl compds. Thus, 6.6 g allyl acetoacetate was treated with 20.0 g perfluorooctanoyl chloride at 50° for 3 h in the presence of Mg and filtered to obtain MeCOCH(COC7F15)CO2CH2CH:CH2, 5.0 g of which was polymerized at 150° for 24 h in the presence of di-tert-Bu peroxide, washed with hexane, and dried to obtain a polymer. THF containing 6% the polymer was applied on a Cu foil and dried at 150° for 30 min to give a test piece showing contact angle for H2O 104° and for dodecane 52° and good moisture resistance.

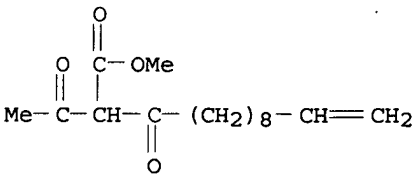
IT **187225-68-9P 187225-69-0P**
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(tricarbonyl group-containing fluoropolymer anticorrosive coatings with good oil and water repellency for metals)

RN 187225-68-9 HCAPLUS

CN 12-Tridecenoic acid, 2-acetyl-3-oxo-, methyl ester, polymer with 2-propenyl 2-acetyl-4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-pentadecafluoro-3-oxodecanoate (9CI) (CA INDEX NAME)

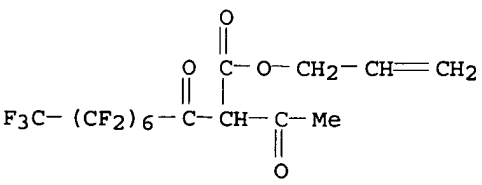
CM 1

CRN 186537-54-2
CMF C16 H26 O4



CM 2

CRN 172211-80-2
CMF C15 H9 F15 O4

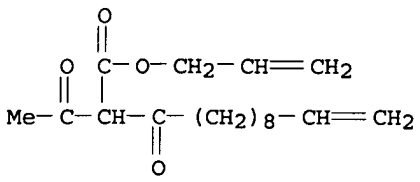


RN 187225-69-0 HCAPLUS

CN 12-Tridecenoic acid, 2-acetyl-3-oxo-, 2-propenyl ester, polymer with 2-propenyl 2-acetyl-4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-pentadecafluoro-3-oxodecanoate (9CI) (CA INDEX NAME)

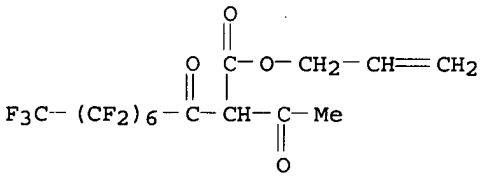
CM 1

CRN 186531-56-6
CMF C18 H28 O4



CM 2

CRN 172211-80-2
CMF C15 H9 F15 O4



IC ICM C08F018-20
ICS C08F016-36; C08F018-12; C08F018-14; C09D005-00; C09D005-08
CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 55, 56
IT 186537-54-2P **187225-68-9P 187225-69-0P**
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(tricarbonyl group-containing fluoropolymer anticorrosive coatings with good oil and water repellency for metals)

L114 ANSWER 27 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:761356 HCAPLUS
DOCUMENT NUMBER: 126:32989
TITLE: Waterproofing, fireproofing, antifungal, and antisoiling polyester fiber products and their manufacture
INVENTOR(S): Umeki, Hideo; Shiotani, Takashi
PATENT ASSIGNEE(S): Toray Industries, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08260352	A2	19961008	JP 1995-69952	1995 0328

PRIORITY APPLN. INFO.: JP 1995-69952
1995
0328

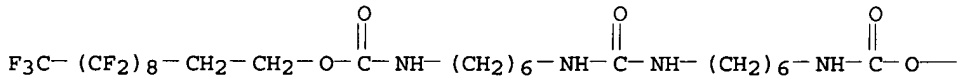
AB The title products, e.g. curtains, are manufactured by treatment in a dyeing bath containing 1.0-20% halocycloalkanes at ≥100° at bath ratio (1:50)-(1:5), then treatment with solns. containing 0.05-10% benzimidazoles and 0.05-10% polyfluoroalkyl group-containing urethanes. Thus, a polyester plain weave fabric was soaked in a dyeing bath containing 1,2,5,6,9,10-hexabromocyclododecane, then soaked in a solution containing C9F19(CH2)2O2CNH(CH2)6NH[CON(CH2)6NHCO2(CH2)2C9F19]2H and 2-methoxycarbonylaminobenzimidazole to give an antifungal and water- and fire-proofing fabric.

IT **184530-13-0**
RL: MOA (Modifier or additive use); USES (Uses)
(waterproofer; water- and fireproofing, antifungal, and antisoiling polyester fabrics containing benzimidazoles, polyfluoroalkylurethanes, and halocycloalkanes)

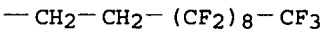
RN 184530-13-0 HCAPLUS

CN 2,9,11,18-Tetraazanonadecanedioic acid, 10-oxo-, bis(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-nonadecafluoroundecyl) ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM D06M013-352
ICS D06M013-08; D06M013-428; D06P003-52

ICI D06M101-32

CC 40-9 (Textiles and **Fibers**)

IT **184530-13-0**
RL: MOA (Modifier or additive use); USES (Uses)
(waterproofer; water- and fireproofing, antifungal, and antisoiling polyester fabrics containing benzimidazoles, polyfluoroalkylurethanes, and halocycloalkanes)

L114 ANSWER 28 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1995:855942 HCAPLUS
DOCUMENT NUMBER: 123:257260
TITLE: Preparation of ganglioside GM3 derivative having fluorinated ceramide moiety as anticancer agent and cancer metastasis inhibitor
INVENTOR(S): Iida, Takao; Ohira, Yutaka
PATENT ASSIGNEE(S): Daikin Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 85 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 9507302	A1	19950316	WO 1994-JP1495	1994 0909
W: AU, US RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 07126278	A2	19950516	JP 1993-331661	1993 1227
AU 9476241	A1	19950327	AU 1994-76241	1994 0909
AU 680047	B2	19970717		
EP 672686	A1	19950920	EP 1994-926380	1994 0909
EP 672686	B1	19981216		
R: DE, FR, GB, SE				
US 5583208	A	19961210	US 1995-432185	1995 0508
PRIORITY APPLN. INFO.:			JP 1993-225764 A	1993 0910
			JP 1993-331661 A	1993 1227
			WO 1994-JP1495 W	1994 0909

OTHER SOURCE(S): CASREACT 123:257260; MARPAT 123:257260
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT
*

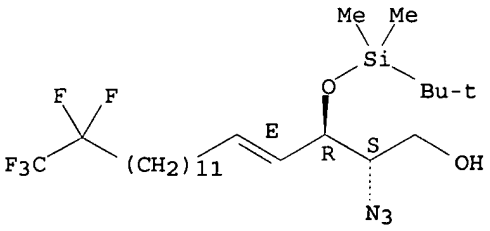
AB A ganglioside GM3 derivative having a fluorinated ceramide moiety, represented by general formula (I; A1 = β-OQ; R1 = R2 = R12 - R17 = H; R = alkyl or fluoroalkyl; m = an integer of ≥2; n = an integer of 0-7, provided that m is greater than n), which inhibits the proliferation of mouse fibroblast A31 cells (no data), is prepared by glycosidation of lactose derivative [II; R11 - R17 = H, HO-protecting group; R18 = tri(C1-4 alkyl)silylethyl] with sialic acid derivative [III; R1 = HO-protecting group; R2 = HO2C-protecting group; R3 = C1-10 alkyl, (un)substituted Ph] in the presence of N-iodosuccinimide and trifluoromethanesulfonic acid salt to give an intermediate I [A1 = β-2-tri(C1-4 alkyl)silylethoxy; R1 = HO-protecting group; R2 = HO2C-protecting group; R11 - R17 = H, HO-protecting group]. A fluorinated 2-azidosphingosine (IV; m = an integer of ≥2; n = an integer of 0-7; R4, R5 = H, HO-protecting group) and a fluorinated α,β-unsatd. aldehyde trans-OHCCH:CH(CH2)m-n(CF2)nCF3 are also prepared as intermediates. Thus, 728 mg II (R11 = R12 = R13 = R15 = H, R14 = R16 = R17 = Bz, R18 = CH2CH2SiMe3) and 460 mg III (R1 = Ac, R2 = R3 = Me) were dissolved in 6 mL anhydrous MeCN, stirred with 2.4 g powdered mol. sieve 4A for 16 h, and cooled to -45°, followed by successively adding 820 mg N-iodosuccinimide and 140 mg CF3SO3NBu4 and stirring the resulting

mixture for 2 h at -45° to -40° to give 48.0% I (A1 = β-OCH2CH2SiMe3, R1 = Ac, R2 = Me, R12 = R13 = R15 = H, R14 = R16 = R17 = Bz). The latter intermediate was converted into a trichloroacetimidate I [A1 = α-OC(:NH)CCl3; R1, R2, R12 - R17 = same as above] which was glycosidated with IV (R4 = Bz, R5 = H, m =12, n = 0) (preparation given) in the presence of mol. sieve 4A and Et2O.BF3 at 0° for 30 min to give 84.4% I (A1 = β-Q1; R1, R2, R12 - R17 = same as above). The latter compound was reduced by H2S in aqueous pyridine, condensed with tetracosanoic acid in the presence of 1-ethyl-3-(3-dimethylaminopropyl) **carbodiimide** hydrochloride in CH2Cl2, and successively treated with NaOMe/MeOH and H2O to give, after column chromatog. using Amberlite IR120 (H+), a title ganglioside GM3 I (A1 = β-Q; wherein R = C23H47, m = 12, n = 0; R1 = R2 = R12 - R17 = H).

IT **168964-46-3P 168964-47-4P 168964-53-2P 168964-56-5P 168964-60-1P 168964-61-2P 168964-80-5P**, trans-15,15,16,16,16-Pentafluoro-2-hexadecenal
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate for preparation of ganglioside GM3 derivs. having fluorinated ceramide moieties as anticancer agents and cancer metastasis inhibitors)

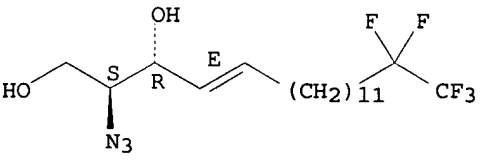
RN 168964-46-3 HCAPLUS
CN 4-Octadecen-1-ol, 2-azido-3-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-17,17,18,18,18-pentafluoro-, [R-[R*,S*-(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

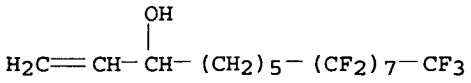


RN 168964-47-4 HCAPLUS
CN 4-Octadecene-1,3-diol, 2-azido-17,17,18,18,18-pentafluoro-, [R-[R*,S*-(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

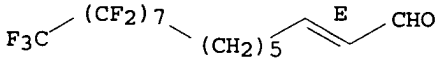


RN 168964-53-2 HCAPLUS
CN 1-Hexadecen-3-ol, 9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-heptadecafluoro- (9CI) (CA INDEX NAME)



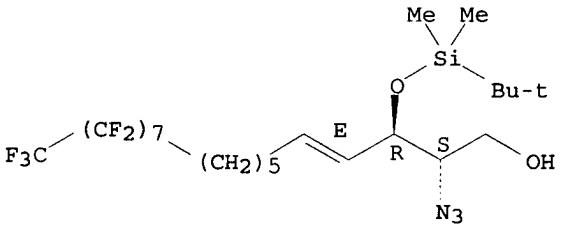
RN 168964-56-5 HCAPLUS
CN 2-Hexadecenal, 9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-heptadecafluoro-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



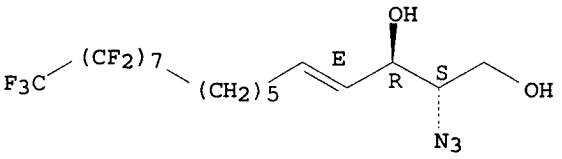
RN 168964-60-1 HCAPLUS
CN 4-Octadecen-1-ol, 2-azido-3-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-11,11,12,12,13,13,14,14,15,15,16,16,17,17,18,18,18-heptadecafluoro-, [R-[R*,S*-(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



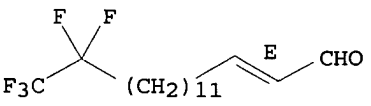
RN 168964-61-2 HCAPLUS
CN 4-Octadecene-1,3-diol, 2-azido-11,11,12,12,13,13,14,14,15,15,16,16,17,17,18,18,18-heptadecafluoro-, [R-[R*,S*-(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 168964-80-5 HCAPLUS
CN 2-Hexadecenal, 15,15,16,16,16-pentafluoro-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



IC ICM C08B037-00
CC 33-8 (Carbohydrates)
Section cross-reference(s): 1

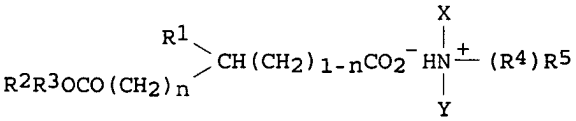
IT 73782-54-4P, 12,12,13,13,13-Pentafluorotridecanol 121377-31-9P
121377-32-0P 124477-22-1P 129794-54-3P, 6-Perfluorooctyl-1-hexanol 168964-28-1P 168964-29-2P 168964-30-5P
168964-31-6P 168964-32-7P 168964-33-8P 168964-34-9P
168964-35-0P 168964-36-1P 168964-37-2P 168964-38-3P
168964-39-4P 168964-40-7P 168964-41-8P 168964-42-9P
168964-43-0P 168964-44-1P 168964-45-2P **168964-46-3P**
168964-47-4P 168964-48-5P 168964-49-6P 168964-50-9P
168964-51-0P 168964-52-1P **168964-53-2P** 168964-54-3P
168964-55-4P **168964-56-5P** 168964-57-6P 168964-58-7P
168964-59-8P **168964-60-1P 168964-61-2P**
168964-62-3P 168964-63-4P 168964-64-5P 168964-65-6P
168964-66-7P 168964-67-8P 168964-68-9P 168964-69-0P
168964-75-8P, 14,14,14-Trifluoro-1-tetradecanol 168964-76-9P,
14,14,14-Trifluorotetradecanal 168964-77-0P,
6-(Perfluorooctyl)hexanal 168964-79-2P, 13-Bromo-1,1,2,2-pentafluorotridecane **168964-80-5P**, trans-15,15,16,16,16-Pentafluoro-2-hexadecenal 169106-07-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate for preparation of ganglioside GM3 derivs. having fluorinated ceramide moieties as anticancer agents and cancer metastasis inhibitors)

L114 ANSWER 29 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1995:735395 HCAPLUS
DOCUMENT NUMBER: 123:274145
TITLE: Fluorine-containing carboxylic acid amine salt and a magnetic recording medium using it as a lubricant
INVENTOR(S): Kai, Yoshiaki; Ohchi, Yukikazu
PATENT ASSIGNEE(S): Matsushita Electric Industrial Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 652206	A2	19950510	EP 1994-116405	1994 1018
EP 652206	A3	19951220		
EP 652206	B1	19990714		
R: DE, FR, GB, NL				
JP 07173105	A2	19950711	JP 1994-251874	1994 1018

PRIORITY APPLN. INFO.: JP 1993-260757 A 1993 1019

OTHER SOURCE(S): MARPAT 123:274145
GI



I

AB The carboxylic acid amine salt has the formula I, where R1 = C6-30 alkyl or alkenyl; R2 = C3-30 fluoroalkyl or fluoroalkenyl, C6-18 fluorophenyl, or C5-50 fluoroalkyl ether; R3,R4 = C1-20 saturated or unsatd. hydrocarbon; R5 = C3-30 fluoroalkyl or fluoroalkenyl; n = 0 or 1; X = H or -(R6)R7; Y = H or -(R8)R9; R6,R8 = C1-20 saturated or unsatd. hydrocarbon; and R7,R9 = C3-30 fluoroalkyl or fluoroalkenyl. A magnetic recording medium comprises a base film, a ferromagnetic film, and a lubricant layer either directly on the ferromagnetic film or on a protective film; the lubricant layer contains ≥1 F-containing carboxylic acid amine salt (I).

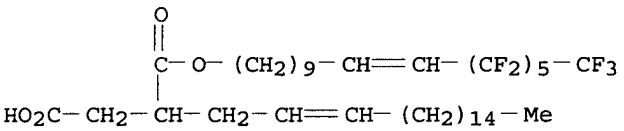
IT **166306-98-5**
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(as lubricant for magnetic recording medium)

RN 166306-98-5 HCAPLUS

CN Butanedioic acid, 2-octadecenyl-, 1-(12,12,13,13,14,14,15,15,16,16,17,17,17-tridecafluoro-10-heptadecenyl) ester, compd. with 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoro-1-undecanamine (1:1) (9CI) (CA INDEX NAME)

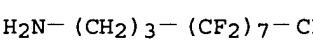
CM 1

CRN 166306-97-4
CMF C39 H59 F13 O4



CM 2

CRN 139175-50-1
CMF C11 H8 F17 N



IC ICM C07C211-15
ICS C07C211-24; C07C069-63; C07C069-65; G11B005-71; C10M105-60

ICI C10N040-18

CC 77-8 (Magnetic Phenomena)

IT **166306-98-5** 169397-35-7
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(as lubricant for magnetic recording medium)

L114 ANSWER 30 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1994:32815 HCAPLUS
DOCUMENT NUMBER: 120:32815
TITLE: Washfast durable water and oil repellents
INVENTOR(S): Maekawa, Takashige; Yoshioka, Ryoko; Kamata, Takashi; Ishida, Mika; Kumai, Seisaku
PATENT ASSIGNEE(S): Asahi Glass Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05171136	A2	19930709	JP 1992-84589	19920306
PRIORITY APPLN. INFO.:			JP 1991-73995	A1 19910313

AB The title agents are based on polymers of fluoroalkyl group-containing monomers forming homopolymers showing the polyfluoroalkyl group-based crystallite m.p. ≥100°. CF3(CF2)9CH2CH2O2CCH:CH2 was polymerized in the presence of AIBN in 1,1,2-trichlorotrifluoroethane, and the resulting polymer (as 1% solution) was used for finishing polyester fabric.

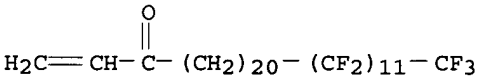
IT **152049-77-9P 152070-15-0P**
RL: PREP (Preparation)
(manufacture of, for oil- and waterproofing textile finishes, washfast)

RN 152049-77-9 HCAPLUS

CN 2-Propenoic acid, 21,21,22,22,23,23,24,24,25,25,26,26,27,27,28,28,29,29,30,30,30-heneicosafluorotriacontyl ester, polymer with 24,24,25,25,26,26,27,27,28,28,29,29,30,30,31,31,32,32,33,33,34,34,35,35,35-pentacosafluoro-1-pentatriaconten-3-one (9CI) (CA INDEX NAME)

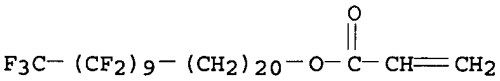
CM 1

CRN 152049-76-8
CMF C35 H43 F25 O



CM 2

CRN 152049-66-6
CMF C33 H43 F21 O2

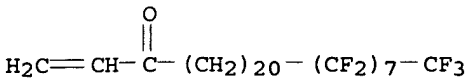


RN 152070-15-0 HCAPLUS

CN 2-Propenoic acid, 21,21,22,22,23,23,24,24,25,25,26,26,27,27,28,28,29,29,30,30,30-heneicosafluorotriacontyl ester, polymer with 24,24,25,25,26,26,27,27,28,28,29,29,30,30,31,31,31-heptadecafluoro-1-hentriaconten-3-one (9CI) (CA INDEX NAME)

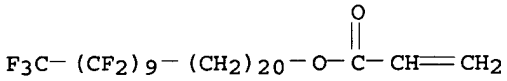
CM 1

CRN 152049-72-4
CMF C31 H43 F17 O



CM 2

CRN 152049-66-6
CMF C33 H43 F21 O2



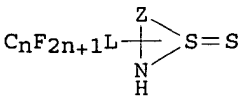
IC ICM C09K003-18
ICS C08F016-24; C08F020-22; D06M015-277
ICA C09D005-00; C09D129-10
CC 40-9 (Textiles and Fibers)
IT 152049-67-7P 152049-69-9P 152049-71-3P 152049-73-5P
152049-75-7P **152049-77-9P** 152049-78-0P 152049-80-4P
152049-81-5P 152049-82-6P 152049-84-8P 152070-12-7P
152070-14-9P **152070-15-0P**
RL: PREP (Preparation)
(manufacture of, for oil- and waterproofing textile finishes, washfast)

L114 ANSWER 31 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1993:673523 HCAPLUS
DOCUMENT NUMBER: 119:273523
TITLE: Oil- and water-repellent method for heavy metal surfaces with perfluoroalkyl thiones
INVENTOR(S): Futaki, Kyoshi; Iguchi, Shigeru; Takada, Masakazu
PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05023645	A2	19930202	JP 1991-207521	19910723

PRIORITY APPLN. INFO.: JP 1991-207521 19910723

OTHER SOURCE(S): MARPAT 119:273523
GI



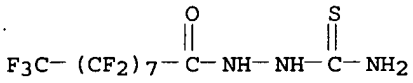
I

AB The title thiones or their corresponding thiols are I or CnH2n+1 LNHNHC:SNHR (L = hydrocarbylene; R = H, low alkyl, low alkenyl, aryl; Z = thiadiazoline, triazoline tetrazoline, dihydrotriazine, tetrahydrotriazine ring residues; n = 6-9). Thus, a Ag plated substrate was treated with a MeOH solution of C8F17CONHNHCSNH2 (prepared from thiosemicarbamide and perfluorononanoyl chloride) to give a surface with linseed oil contact angle 77.9° and water contact angle 123.7°.

IT **150502-54-8P**
RL: PREP (Preparation)
(manufacture of, as oil- and water-repellent agents, for heavy metals)

RN 150502-54-8 HCAPLUS

CN Nonanoic acid, heptadecafluoro-, 2-(aminothioxomethyl)hydrazide (9CI) (CA INDEX NAME)



IC ICM B05D007-24
ICS B05D005-08; B05D007-14; C09K003-18

CC 42-10 (**Coatings**, Inks, and Related Products)
Section cross-reference(s): 55, 56

IT 150502-50-4P 150502-51-5P 150502-52-6P 150502-53-7P
150502-54-8P 150523-74-3P
RL: PREP (Preparation)
(manufacture of, as oil- and water-repellent agents, for heavy metals)

L114 ANSWER 32 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1992:153950 HCAPLUS
DOCUMENT NUMBER: 116:153950
TITLE: Urethanes from aliphatic fluoroalcohols, isocyanates and carboxylic acids as finishes for textiles
INVENTOR(S): Knaup, Wolfgang; Kupfer, Rainer; Kleber, Rolf; Jaeckel, Lothar; Gohlke, Fritz Joachim
PATENT ASSIGNEE(S): Hoechst A.-G., Germany
SOURCE: Eur. Pat. Appl., 21 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 435220	A2	19910703	EP 1990-125271	19901221
EP 435220	A3	19911121		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL				
DE 3943127	A1	19910704	DE 1989-3943127	19891228
US 5171877	A	19921215	US 1990-633806	19901226
CA 2033313	AA	19910629	CA 1990-2033313	19901227
JP 03294258	A2	19911225	JP 1990-409119	

1990
1228
PRIORITY APPLN. INFO.: DE 1989-3943127 A
1989
1228

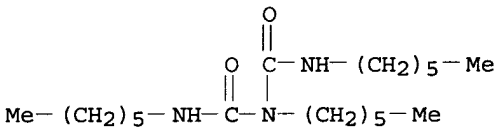
AB The urethanes R[ZCONHZ1[NHCO[OCH(CH2Cl)CH2]yO(CH2)xRf]NHCO[OCH(CH2Cl)CH2]mO(CH2)nRf1]s [R = residue of a carboxylic acid (functionality 1-5) or salt; Rf, Rf1 = C4-22 perfluoroalkyl; Z = direct bond, O, imino; Z1 = trivalent (cyclo)aliphatic or aromatic group; m, x = 1-4; n, y = 0-7, s = 1-3] are useful as water-, oil-, and soilproofing finishes for textiles. The reaction of 1 mol diurethane from HMDI biuret triisocyanate, C10F21CH2CH2OH, and C10F21CH2CH2O[CH2CH(CH2Cl)O]2H with 1 mol citric acid gave a triurethane (I). Polyamide fabrics finished with I (0.05% F based on fibers) and condensed at 200° for 30 s had oilproofing rating (AATCC standard 118) 6, waterproofing rating (DIN 53 888, 1965) 5, and soilproofing rating (5 best, 1 worst) 3; vs. 5, 5, and 4, resp., after 3 h of alkaline washing.

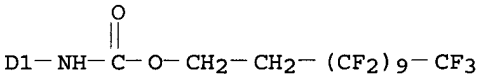
IT **137112-83-5P 137112-84-6P 137133-95-0P 137133-97-2P 137151-33-8P 137172-80-6P**
RL: PREP (Preparation)
(manufacture of, as waterproofing and soilproofing finishes for fabrics)

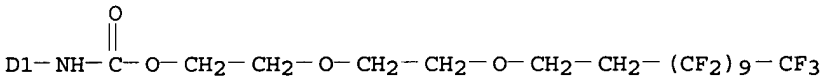
RN 137112-83-5 HCAPLUS

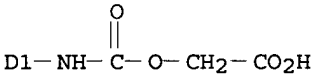
CN 20-Oxa-2,9,11,18-tetraazadocosanedioic acid, 9-(or 11)-[6-(carboxyamino)hexyl]-10,19-dioxo-, mono[(chloromethyl)[(chloromethyl)-2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl)oxy]ethoxy]ethyl] mono(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl) ester (9CI) (CA INDEX NAME)

PAGE 1-A

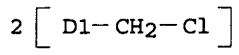








PAGE 2-A

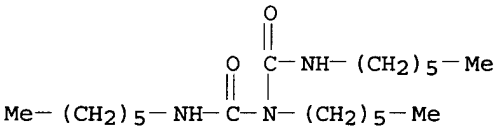


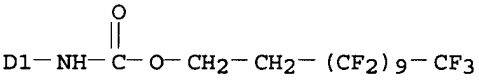
RN 137112-84-6 HCAPLUS
CN 20-Oxa-2,9,11,18-tetraazadocosanedioic acid, 9(or 11)-[6-(carboxyamino)hexyl]-10,19-dioxo-, mono[(chloromethyl)[(chloromethyl)-2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,9,10,11,11,12,12,12-heneicosafluorododecyl)oxy]ethoxy]ethyl] mono(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl) ester, compd. with 2-aminoethanol (1:1) (9CI) (CA INDEX NAME)

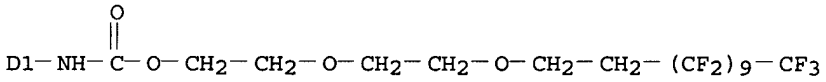
CM 1

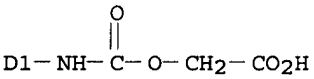
CRN 137112-83-5
CMF C55 H62 Cl2 F42 N6 O12
CCI IDS

PAGE 1-A

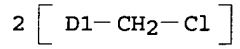






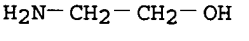


PAGE 2-A



CM 2

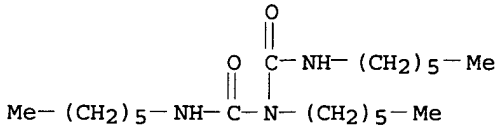
CRN 141-43-5
CMF C2 H7 N O

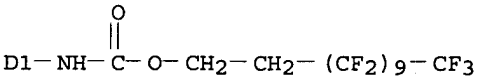


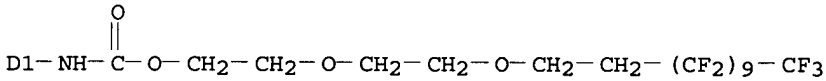
RN 137133-95-0 HCAPLUS
CN 2,9,11,18-Tetraazatetracosanedioic acid, 9(or 11)-[[[6-(carboxyamino)hexyl]amino]carbonyl]-, mono[(chloromethyl)-2-[(chloromethyl)-2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl)oxy]ethoxy]ethyl]

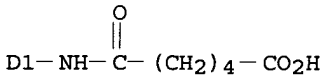
mono(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl) ester (9CI) (CA INDEX NAME)

PAGE 1-A

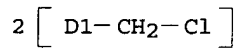








PAGE 2-A



RN 137133-97-2 HCAPLUS
CN 11,15-Dioxa-2,9,17,24-tetraazapentacosanedioic acid, 13-[[(1,2-dicarboxyethoxy)carbonyl]amino]-13-ethyl-, 1,25-bis[(chloromethyl)-2-[(chloromethyl)-2-[(chloromethyl)-2-[(2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heneicosafluoroundecyl)oxy]ethoxy]ethoxy]ethyl] ester (9CI) (CA INDEX NAME)

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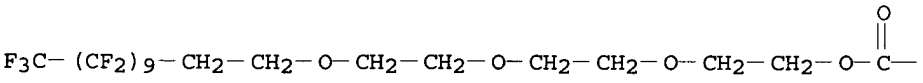
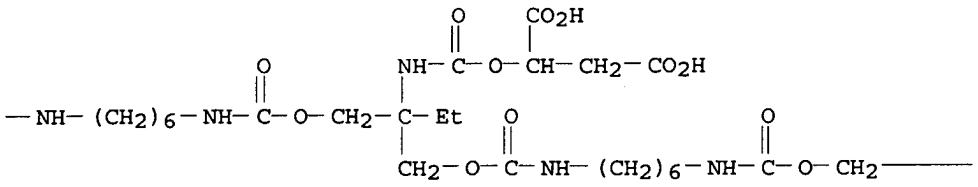
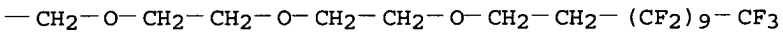


PAGE 1-B

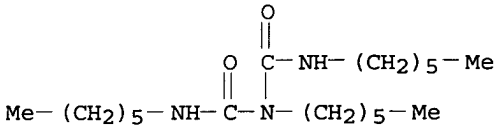


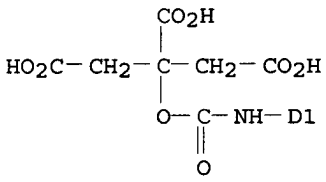
PAGE 1-C

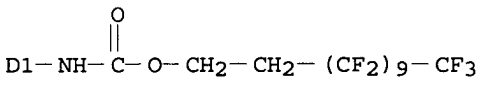


RN 137151-33-8 HCAPLUS
CN 2,9,11,18-Tetraazanonadecanedioic acid, 9(or 11)-[[[6-(carboxyamino)hexyl]amino]carbonyl]-10-oxo-, 1,2-dicarboxy-1-(carboxymethyl)ethyl (chloromethyl)-2-[(chloromethyl)-2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl)oxy]ethoxy]ethyl 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl ester (9CI) (CA INDEX NAME)

PAGE 1-A







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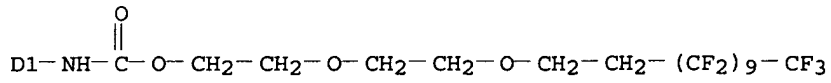

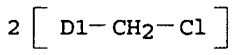

RN 137172-80-6 HCAPLUS
CN Carbamic acid, [[[6-(carboxyamino)hexyl]imino]bis(carbonylimino-6,1-hexanediyl)]bis-, carboxymethyl (chloromethyl)-2-[(chloromethyl)-2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl)oxy]ethoxy]ethyl 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl ester, compd. with 1-dodecanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 137112-83-5
CMF C55 H62 Cl2 F42 N6 O12
CCI IDS

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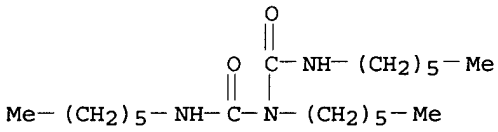
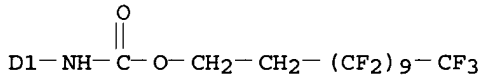
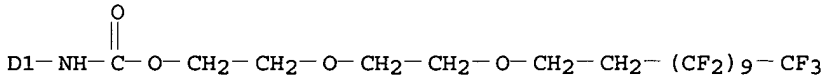
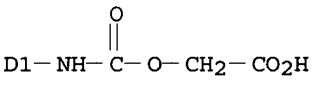
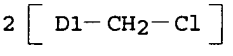








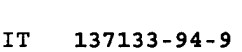
PAGE 2-A



CM 2

CRN 124-22-1

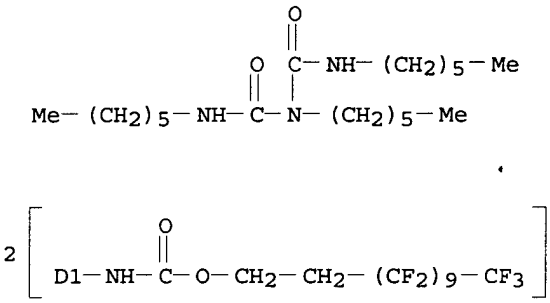
CMF C12 H27 N



IT **137133-94-9 137151-31-6 137151-32-7**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with carboxylic acids)

RN 137133-94-9 HCAPLUS

CN Imidodicarbonic diamide, N,N',2-tris(6-isocyanatohexyl)-, adduct with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluoro-1-dodecanol (1:2) (9CI) (CA INDEX NAME)

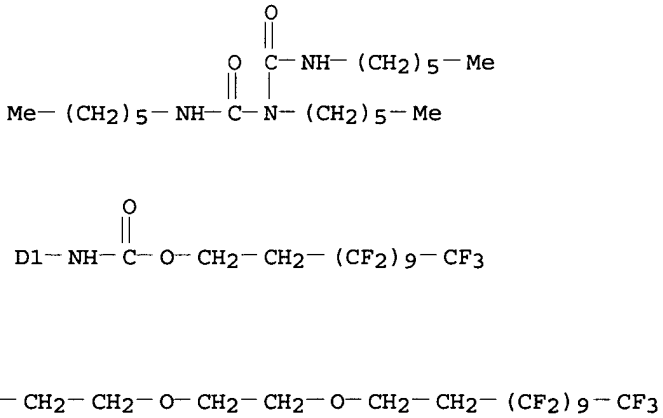


D1—NCO

RN 137151-31-6 HCAPLUS

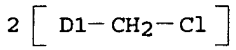
CN Imidodicarbonic diamide, [bis(chloromethyl)-18,18,19,19,20,20,21,21,22,22,23,23,24,24,25,25,26,26,27,27,27-heneicosafluoro-8-oxo-9,12,15-trioxa-7-azaheptacos-1-yl][6-[[[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl)oxy]carbonyl]amino]hexyl]isocyanato- (9CI) (CA INDEX NAME)

PAGE 1-A



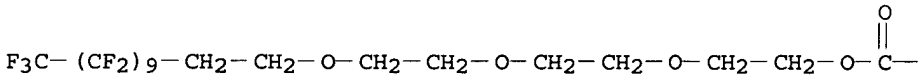
D1—NCO

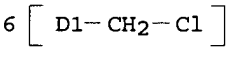
PAGE 2-A



RN 137151-32-7 HCAPLUS
CN 11,15-Dioxa-2,9,17,24-tetraazapentacosanedioic acid, 13-ethyl-13-[[[[(6-isocyanatohexyl)amino]carbonyl]oxy]methyl]-10,16-dioxo-, bis[(chloromethyl)-2-[(chloromethyl)-2-[(chloromethyl)-2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl)oxy]ethoxy]ethoxy]ethyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A





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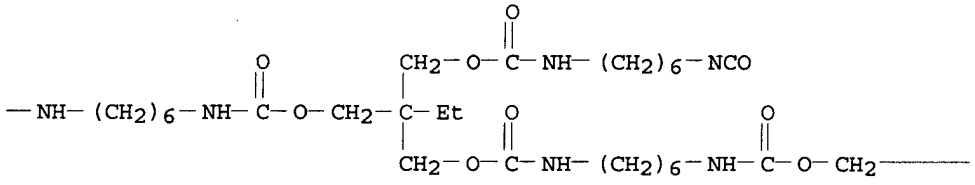

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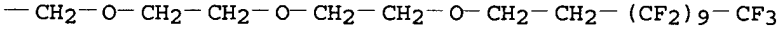


IC ICM C07C027-28
ICS C07C275-14; C07D251-32; C07C271-20; D06M013-425; D06M013-432
CC 42-9 (**Coatings**, Inks, and Related Products)
Section cross-reference(s): 23, **40**
IT **137112-83-5P** **137112-84-6P** **137133-95-0P**
137133-96-1P **137133-97-2P** 137134-04-4P 137134-05-5P
137151-33-8P 137151-34-9P **137172-80-6P**
137179-08-9P 140114-42-7P
RL: PREP (Preparation)
(manufacture of, as waterproofing and soilproofing finishes for

fabrics)
IT **137133-94-9 137151-31-6 137151-32-7**
140114-41-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with carboxylic acids)

L114 ANSWER 33 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1991:452032 HCAPLUS
DOCUMENT NUMBER: 115:52032
TITLE: Waxes for skis giving consistent sliding for long times
INVENTOR(S): Tokui, Yasuyuki; Tanaka, Isao; Morimoto, Takuo; Ohtoshi, Sachio; Yamauchi, Masaru
PATENT ASSIGNEE(S): Asahi Glass Co., Ltd., Japan; Asics Corp.
SOURCE: Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 421303	A2	19910410	EP 1990-118706	19900928
EP 421303	A3	19910731		
R: AT, CH, DE, FR, IT, LI, SE				
JP 03115395	A2	19910516	JP 1989-251781	19890929
JP 07000791	B4	19950111		
JP 03157495	A2	19910705	JP 1989-294829	19891115
JP 07000792	B4	19950111		
JP 03157496	A2	19910705	JP 1989-294830	19891115
JP 07076351	B4	19950816		
JP 03157497	A2	19910705	JP 1989-294831	19891115
JP 07000793	B4	19950111		
JP 03157494	A2	19910705	JP 1989-294832	19891115
JP 07076350	B4	19950816		
US 5131674	A	19920721	US 1990-588848	19900927
PRIORITY APPLN. INFO.:			JP 1989-251781 A	19890929
			JP 1989-294829 A	19891115
			JP 1989-294830 A	19891115
			JP 1989-294831 A	19891

1115

JP 1989-294832 A
1989
1115

AB The title wax contains perfluoroalkyl compds. (m.p. ≤100°) and, optionally, paraffin wax. Spreading molten C17F15CO2C18H37 (m.p. 36°) on skis, cooling at 10° for 8 h, and rubbing to a smooth surface gave skis with initial speed 64.52 km/h and average speed 83.51 km/h; vs. 60.03 and 75.88, resp., with a paraffin wax.

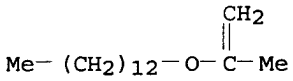
IT **134959-87-8**
RL: USES (Uses)
(waxes for skis)

RN 134959-87-8 HCAPLUS

CN 2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl ester, polymer with 1-[(1-methylethenyl)oxy]tridecane (9CI) (CA INDEX NAME)

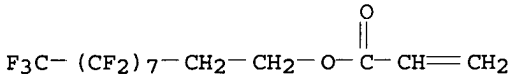
CM 1

CRN 134959-86-7
CMF C16 H32 O



CM 2

CRN 27905-45-9
CMF C13 H7 F17 O2



IC ICM C09G003-00

CC 42-11 (Coatings, Inks, and Related Products)

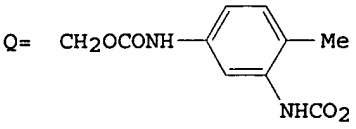
IT 678-39-7 7782-42-5D, Graphite, fluorinated 131883-38-0
134959-87-8
RL: USES (Uses)
(waxes for skis)

L114 ANSWER 34 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1991:64200 HCAPLUS
DOCUMENT NUMBER: 114:64200
TITLE: Oil-, soil-, and water-repellent compositions for carpets
INVENTOR(S): Sekiwa, Hideyuki; Nakamura, Seiichi
PATENT ASSIGNEE(S): Nippon Mektron Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 02209984	A2	19900821	JP 1989-29675	1989 0210
PRIORITY APPLN. INFO.:			JP 1989-29675	1989 0210

GI



AB The title compns. contain (A) aqueous dispersions of RCnH2nOCONHR1NHCO2R2 [R = C≥6 perfluoroalkyl, R1 = hydrocarbylene; R2 = (substituted) hydrocarbyl, n = 1-4) or (RCnH2nOCONH)aR3[NHCO2(C2H4O)mR4]3-a (R3 = trivalent hydrocarbon group; R4 = H, lower alkyl; a = 1-2; m = 10-100), (B) aqueous dispersions of perfluoroalkyl (meth)acrylate polymers, and (C) aqueous dispersions of R5R6C:NOCONHR1NHCO2N:CR5R6 (R1 = hydrocarbylene, R5, R6 = lower alkyl). Thus, a composition containing (A) 15% aqueous dispersion of C9F19CH2QMe and EtC(QC2H4C9F19)(Q(C2H4O)46Me]2, (B) 15% aqueous dispersion of a polymer of CH2:CCl2, N-methylolacrylamide, and CH2:CHCO2C2H4CnF2n+1 (n = 6, 8, 10, 12), and (c) 15% aqueous dispersion of EtMeC:NOCONH(CH2)6NHCO2N:CMeEt at 3:4:3 ratio showed good oil, soil, and water repellency (on nylon carpet).

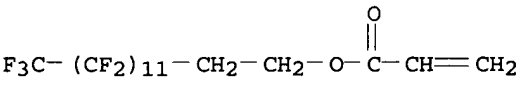
IT **131630-40-5 131630-48-3**
RL: USES (Uses)
(aqueous oil- and soil- and water-repellent dispersions containing, for carpets)

RN 131630-40-5 HCAPLUS

CN 2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl ester, polymer with 1,1-dichloroethene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-propenoate, N-(hydroxymethyl)-2-propenamide, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluorotetradecyl 2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl 2-propenoate (9CI) (CA INDEX NAME)

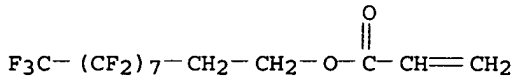
CM 1

CRN 34395-24-9
CMF C17 H7 F25 O2



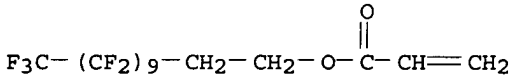
CM 2

CRN 27905-45-9
CMF C13 H7 F17 O2



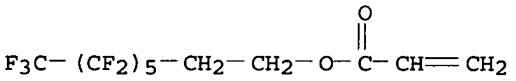
CM 3

CRN 17741-60-5
CMF C15 H7 F21 O2



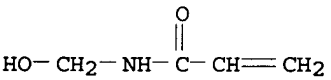
CM 4

CRN 17527-29-6
CMF C11 H7 F13 O2



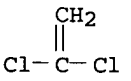
CM 5

CRN 924-42-5
CMF C4 H7 N O2



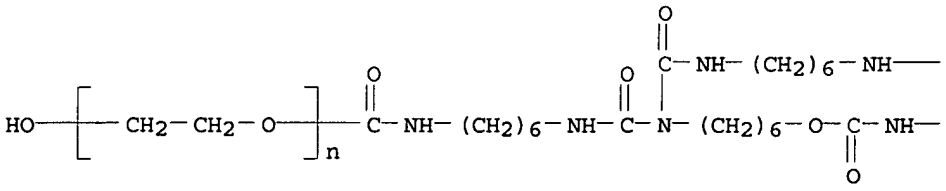
CM 6

CRN 75-35-4
CMF C2 H2 Cl2

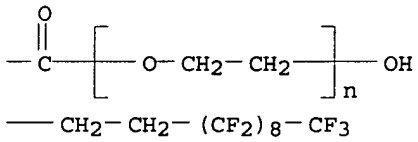


RN 131630-48-3 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α,α'-[11-[6-[[[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-nonadecafluoroundecyl)amino]carbonyl]oxy]hexyl]-1,10,12,21-tetraoxo-2,9,11,13,20-pentaazaheneicosane-1,21-diyl]bis[ω-hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM C09K003-18
ICS C09K003-20
ICA D06M013-428; D06M015-277
CC 40-9 (Textiles and **Fibers**)
IT 41704-39-6 77337-86-1 80466-15-5 **131630-40-5**
131630-47-2 **131630-48-3** 131851-91-7
RL: USES (Uses)
(aqueous oil- and soil- and water-repellent dispersions containing, for carpets)

L114 ANSWER 35 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1991:25475 HCAPLUS
DOCUMENT NUMBER: 114:25475
TITLE: Fluoropolymer-coated coasters
INVENTOR(S): Kamimura, Masakado; Sakata, Shinsuke; Shinjo, Masayoshi
PATENT ASSIGNEE(S): Daikin Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02159219	A2	19900619	JP 1988-315700	19881214

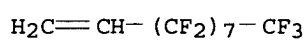
PRIORITY APPLN. INFO.: JP 1988-315700 19881214

AB The title coasters, with good soilproofing property, no adhesion to cup even at wet condition, and capable for repeated use, have surface layers of C4-21 perfluoroalkyl or alkenyl group-containing compds. Thus, a 1.5-mm paper coaster was coated (0.15 μm) with a 2% [(OCHRCH2)4O(CH2)4]6 [R = CH2(CF2)6CF(CF3)2] solution in trifluorochloroethane and dried 30 min to give a coaster having no adhesion to a cup filled with ice water, no soiling by hot coffee drops, and capable to use >10 times, vs. adhered to the cup, soiled by hot coffee, and capable to use only 1 time, for the uncoated coaster.

IT **107066-98-8**
RL: USES (Uses)
(paper coasters coated with, soilproof, with no adhesion to wet cup)
RN 107066-98-8 HCAPLUS
CN Octadecanoic acid, ethenyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-1-decene (9CI) (CA INDEX NAME)

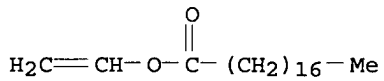
CM 1

CRN 21652-58-4
CMF C10 H3 F17



CM 2

CRN 111-63-7
CMF C20 H38 O2



IC ICM A47G023-03
ICS D21H019-20
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 42
IT 88439-27-4 100044-20-0 107015-33-8 **107066-98-8**
125953-58-4 131092-13-2 131092-14-3
RL: USES (Uses)
(paper coasters coated with, soilproof, with no adhesion to wet cup)

L114 ANSWER 36 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1990:159790 HCAPLUS
DOCUMENT NUMBER: 112:159790
TITLE: Plasticizer antibleeding agents and thermoplastic resins containing them
INVENTOR(S): Amimoto, Yoshio; Shinjo, Masayoshi; Takubo, Seiji
PATENT ASSIGNEE(S): Daikin Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01242641	A2	19890927	JP 1988-70778	19880323
JP 2526630	B2	19960821		

PRIORITY APPLN. INFO.: JP 1988-70778 19880323

AB Thermoplastics (e.g., PVC) mixed (or coated) with C4-21 perfluoroalk(en)yl group-containing compds. have smooth, transparent surfaces and good resistance to exudation of plasticizers. A 0.05-mm film of PVC containing 60 phr DOP was spray coated (0.08 μm) with F3CCl containing .apprx.1% F(CF2)8CH2CH2O2CNHR (R = 3-methoxycarbonylamino-4-methylphenyl), rolled, and stored 2 wk at 40° and 90% relative humidity to give a film having a dry feel, peel strength (between 2 films after pressing 24 h at 40° and 30 kg/240 cm2) 17 g/4 cm, smooth surface, and good transparency, vs. tacky, 120, smooth, and good, resp., for uncoated PVC film.

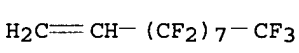
IT **107066-98-8**
RL: USES (Uses)
(plasticizer migration inhibitors, for PVC)

RN 107066-98-8 HCAPLUS

CN Octadecanoic acid, ethenyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-1-decene (9CI) (CA INDEX NAME)

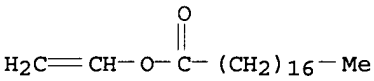
CM 1

CRN 21652-58-4
CMF C10 H3 F17



CM 2

CRN 111-63-7
CMF C20 H38 O2



IC ICM C08K005-53
ICS C07C069-63; C07C069-76; C07C125-06; C07F009-09; C07F009-32; C07F009-40; C08J007-04; C08K005-02; C08K005-10; C08K005-15; C08K005-16; C08K005-41; C08K005-52; C08K005-53

CC 37-6 (Plastics Manufacture and Processing)

IT 2250-98-8 63513-12-2 88439-27-4 99955-83-6 100044-20-0 **107066-98-8** 125930-25-8 125930-26-9 125930-27-0 125953-58-4 126105-14-4 126108-48-3
RL: USES (Uses)
(plasticizer migration inhibitors, for PVC)

L114 ANSWER 37 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1988:39776 HCAPLUS
DOCUMENT NUMBER: 108:39776
TITLE: Coating materials
INVENTOR(S): Shimamura, Kiyoshi; Horikawa, Katsuji; Teraoka, Tsutomu
PATENT ASSIGNEE(S): Asahi Chemical Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 62190264	A2	19870820	JP 1986-31956	1986 0218
JP 06086581	B4	19941102		
PRIORITY APPLN. INFO.:			JP 1986-31956	1986 0218

AB Nonsticky, water- and oil-repellent, soiling-resistant coating materials are prepared by reacting 100 parts block copolymers of (meth)acrylate esters containing F and no active H and (meth)acrylate esters containing active H with 0.1-200 parts polyisocyanates and 0.01-150 parts compds. containing >1 active H and >1 polymerizable double bond and mixing 0.1-100 parts these adducts with 100 parts radiation-curable compns. such as acrylic acid ester mixts. Thus, 45:140:15:70 (monomer feed ratio) Me acrylate-Me methacrylate-2-hydroxyethyl acrylate-CH2:CHCO2C2H4(CF2)7CF3 block copolymer was prepared using a polymeric peroxide, modified with Duranate 24A (hexamethylene diisocyanate biuret) and 2-hydroxyethyl acrylate, mixed with a Duranate 24A-NK ester TMM3L (pentaerythritol triacrylate) adduct, tetrahydrofurfuryl acrylate, trimethylolpropane triacrylate and Irgacure 651, coated on a Deraglass A sheet, and irradiated with a Hg lamp to form a coating.

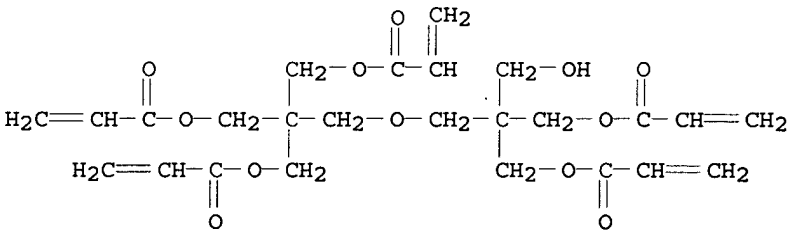
IT **112284-52-3**
RL: TEM (Technical or engineered material use); USES (Uses)
(coatings, UV-curable, on PMMA)

RN 112284-52-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-(2-ethoxyethoxy)ethyl 2-propenoate, ethyl 2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-propenoate, 2-[[3-hydroxy-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl 2-propenoate, 2-hydroxyethyl 2-propenoate, methyl 2-propenoate, 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, 2,2'-[oxybis(methylene)]bis[2-(hydroxymethyl)-1,3-propanediol] tetra-2-propenoate and N,N',2-tris(6-isocyanatohexyl)imidodicarbonic diamide (9CI) (CA INDEX NAME)

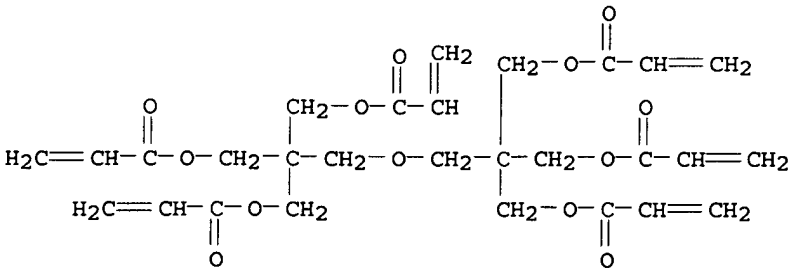
CM 1

CRN 60506-81-2
CMF C25 H32 O12



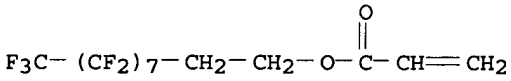
CM 2

CRN 29570-58-9
CMF C28 H34 O13



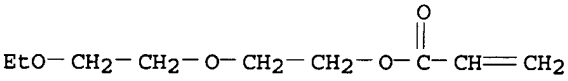
CM 3

CRN 27905-45-9
CMF C13 H7 F17 O2



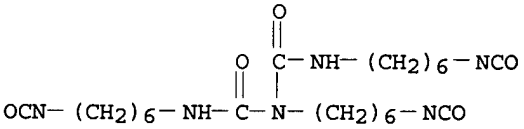
CM 4

CRN 7328-17-8
CMF C9 H16 O4



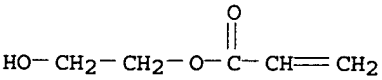
CM 5

CRN 4035-89-6
CMF C23 H38 N6 O5



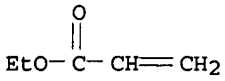
CM 6

CRN 818-61-1
CMF C5 H8 O3



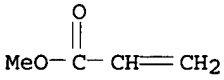
CM 7

CRN 140-88-5
CMF C5 H8 O2



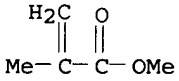
CM 8

CRN 96-33-3
CMF C4 H6 O2



CM 9

CRN 80-62-6
CMF C5 H8 O2

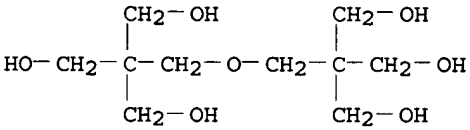


CM 10

CRN 63971-15-3
CMF C22 H30 O11
CCI IDS

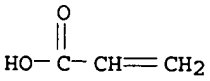
CM 11

CRN 126-58-9
CMF C10 H22 O7



CM 12

CRN 79-10-7
CMF C3 H4 O2

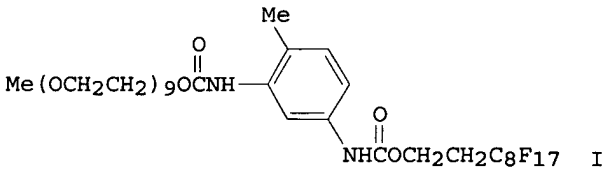


IC ICM C09D003-727
ICS C08F002-48; C08F299-06; C08G018-67; C09D005-00
CC 42-10 (**Coatings**, Inks, and Related Products)
IT 112250-78-9 112250-79-0 112250-80-3 112250-81-4
112250-82-5 112250-83-6 112250-84-7 112250-85-8
112275-31-7 112275-32-8 112275-33-9 112275-34-0
112275-35-1 **112284-52-3** 112284-53-4 112284-54-5
112284-55-6 112315-76-1
RL: TEM (Technical or engineered material use); USES (Uses)
(coatings, UV-curable, on PMMA)

L114 ANSWER 38 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1987:103929 HCAPLUS
DOCUMENT NUMBER: 106:103929
TITLE: Deicing coatings not requiring primers, and their application to various articles
INVENTOR(S): Enjo, Naonori; Shinjo, Masayoshi; Okazaki, Yasuko; Hayashi, Kazunori
PATENT ASSIGNEE(S): Daikin Industries, Ltd., Japan
SOURCE: Eur. Pat. Appl., 37 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 200229	A2	19861105	EP 1986-106033	19860502
EP 200229	A3	19880720		
EP 200229	B1	19920311		
R: DE, FR, GB				
JP 61254675	A2	19861112	JP 1985-94888	19850502
US 4685967	A	19870811	US 1986-856342	19860428
PRIORITY APPLN. INFO.:			JP 1985-94888 A	19850502

GI



I

AB Title coatings comprise solvent-based resin compns. and 0.1-75% (based on resin) C6-20 perfluoroalkyl group-containing urethane, phosphate, phosphonic acid derivative, phosphinic acid derivative, polyether, polyester, and/or polyvinyl compds. Acrylic 1000 (solvent-based acrylic resin coating) was mixed with a solution of I 20, Cl3CCF3 40, and acetone 40%, applied to stainless steel, and

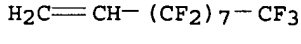
dried at room temperature to give a 10-μ coating that showed ice breaking strength 0.7 kg/cm2 after freezing for 2 h at -10°, vs. 3.5 for Acrylic 1000 alone.

IT **107066-98-8**
RL: USES (Uses)
(coatings containing, for reduced adhesion of ice)

RN 107066-98-8 HCAPLUS
CN Octadecanoic acid, ethenyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-1-decene (9CI) (CA INDEX NAME)

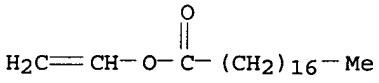
CM 1

CRN 21652-58-4
CMF C10 H3 F17



CM 2

CRN 111-63-7
CMF C20 H38 O2



IC ICM C09D005-12
ICS C09K003-18
CC 42-10 (Coatings, Inks, and Related Products)
IT 678-41-1 92661-21-7 107020-94-0 107066-97-7
107066-98-8 107097-76-7
RL: USES (Uses)
(coatings containing, for reduced adhesion of ice)

L114 ANSWER 39 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1986:553710 HCAPLUS
DOCUMENT NUMBER: 105:153710
TITLE: Perfluoroalkylvinyl polymer and its use
INVENTOR(S): Fukui, Shoshin; Shinjo, Masayoshi; Aoyama, Hirokazu; Okazaki, Yasuko; Enjo, Naonori; Hayashi, Kazunori
PATENT ASSIGNEE(S): Daikin Industries, Ltd., Japan
SOURCE: Eur. Pat. Appl., 29 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 184081	A2	19860611	EP 1985-114823	1985 1122
EP 184081	A3	19861029		
EP 184081	B1	19900321		
R: DE, FR, GB				
US 4673712	A	19870616	US 1985-800387	1985

				1121
CN 85109162	A	19861001	CN 1985-109162	
				1985
				1122
CN 85109162	B	19880622		
JP 61281112	A2	19861211	JP 1985-263320	
				1985
				1122
JP 01026601	B4	19890524		
EP 304056	A1	19890222	EP 1988-113432	
				1985
				1122
EP 304056	B1	19920219		
R: DE, FR, GB				
JP 01158089	A2	19890621	JP 1988-293430	
				1988
				1118
JP 2551126	B2	19961106		
JP 01158092	A2	19890621	JP 1988-293431	
				1988
				1118
JP 08019192	B4	19960228		
PRIORITY APPLN. INFO.:			JP 1984-247803	A
				1984
				1122
			EP 1985-114823	P
				1985
				1122

AB A perfluoroallsylvinyl copolymer comprises repeating units of CHRCH2 (R = C5-12 perfluoroalkyl) and CHYCHZ or CMe(CO2R1)CH2 [Y = OR2, CO2R2, O2CR2; Z = H, CO2R3; R2,R3 = C1-18 alkyl (when Y = OR2 or O2CR2, then Z = H); R1 = C1-18 alkyl]. Thus, CF3CF2(CF2CF2)nCH:CH2 (n = 3, 4, 5, 6, 7; 61.94, 27.89, 8.89, 1.2, and 0.08 mol%, resp.) 12.53, Me(CH2)17OCH:CH2 7.47, and tert-butylperoxypropyl carbonate 1.4 g were polymerized at 110° for 6 h, giving a pale yellow grease with glass temperature 23.2°. The product dissolved (1%) in 20:80 acetone-Cl3F3C2. The water and **oil repellancy** of a polyester **fabric** dipped into the product-solution was 80 and 70, resp.

IT **104630-54-8P 104630-55-9P 104630-56-0P**
104630-57-1P 104630-58-2P 104630-59-3P
104630-60-6P 104630-61-7P
RL: PREP (Preparation)
(preparation of, as mold-release agent, water and **oil repellent** and non-tackifier)

RN 104630-54-8 HCAPLUS

CN 1-Octadecene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,17,17,18,18,18-tritriacontafluoro-, polymer with 1-(ethenyloxy)-2-methylpropane, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluoro-1-dodecene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-1-decene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafluoro-1-hexadecene and 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluoro-1-tetradecene (9CI) (CA INDEX NAME)

CM 1

CRN 104564-29-6
CMF C18 H3 F33

$H_2C{=}CH{-}(CF_2)_{15}{-}CF_3$

CM 2

CRN 104564-28-5
CMF C16 H3 F29

$H_2C{=}CH{-}(CF_2)_{13}{-}CF_3$

CM 3

CRN 67103-05-3
CMF C14 H3 F25

$H_2C{=}CH{-}(CF_2)_{11}{-}CF_3$

CM 4

CRN 30389-25-4
CMF C12 H3 F21

$H_2C{=}CH{-}(CF_2)_{9}{-}CF_3$

CM 5

CRN 21652-58-4
CMF C10 H3 F17

$H_2C{=}CH{-}(CF_2)_{7}{-}CF_3$

CM 6

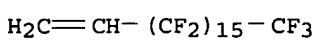
CRN 109-53-5
CMF C6 H12 O

i-BuO$-CH{=}CH_2$

RN 104630-55-9 HCAPLUS
CN Octadecane, 1-(ethenyloxy)-, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluoro-1-dodecene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-1-decene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafluoro-1-hexadecene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluoro-1-tetradecene and 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,17,17,18,18,18-tritriacontafluoro-1-octadecene (9CI) (CA INDEX NAME)

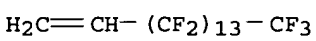
CM 1

CRN 104564-29-6
CMF C18 H3 F33



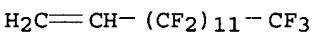
CM 2

CRN 104564-28-5
CMF C16 H3 F29



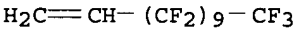
CM 3

CRN 67103-05-3
CMF C14 H3 F25



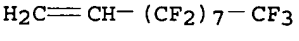
CM 4

CRN 30389-25-4
CMF C12 H3 F21



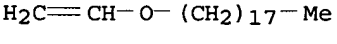
CM 5

CRN 21652-58-4
CMF C10 H3 F17



CM 6

CRN 930-02-9
CMF C20 H40 O

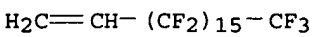


RN 104630-56-0 HCAPLUS
CN Acetic acid ethenyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluoro-1-dodecene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-1-decene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafluoro-1-hexadecene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluoro-1-tetradecene and 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,1

0,11,11,12,12,13,13,14,14,15,15,16,16,17,17,18,18,18-
tritriacontafluoro-1-octadecene (9CI) (CA INDEX NAME)

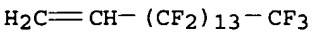
CM 1

CRN 104564-29-6
CMF C18 H3 F33



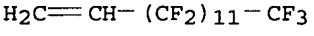
CM 2

CRN 104564-28-5
CMF C16 H3 F29



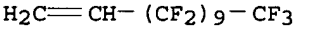
CM 3

CRN 67103-05-3
CMF C14 H3 F25



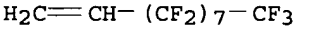
CM 4

CRN 30389-25-4
CMF C12 H3 F21



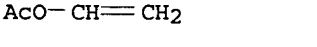
CM 5

CRN 21652-58-4
CMF C10 H3 F17



CM 6

CRN 108-05-4
CMF C4 H6 O2

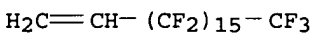


RN 104630-57-1 HCAPLUS
CN Octanoic acid, ethenyl ester, polymer with
3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluoro-1-
dodecene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-1-

decene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,
15,15,16,16,16-nonacosafluoro-1-hexadecene,
3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-
pentacosafluoro-1-tetradecene and 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,1
0,11,11,12,12,13,13,14,14,15,15,16,16,17,17,18,18,18-
tritriacontafluoro-1-octadecene (9CI) (CA INDEX NAME)

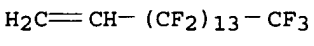
CM 1

CRN 104564-29-6
CMF C18 H3 F33



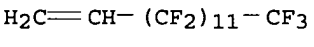
CM 2

CRN 104564-28-5
CMF C16 H3 F29



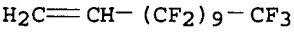
CM 3

CRN 67103-05-3
CMF C14 H3 F25



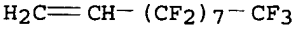
CM 4

CRN 30389-25-4
CMF C12 H3 F21



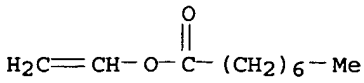
CM 5

CRN 21652-58-4
CMF C10 H3 F17



CM 6

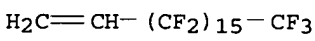
CRN 818-44-0
CMF C10 H18 O2



RN 104630-58-2 HCAPLUS
CN Octadecanoic acid, ethenyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluoro-1-dodecene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-1-decene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafluoro-1-hexadecene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluoro-1-tetradecene and 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,17,17,18,18,18-tritriacontafluoro-1-octadecene (9CI) (CA INDEX NAME)

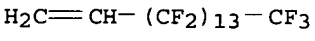
CM 1

CRN 104564-29-6
CMF C18 H3 F33



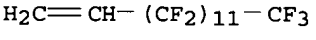
CM 2

CRN 104564-28-5
CMF C16 H3 F29



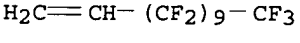
CM 3

CRN 67103-05-3
CMF C14 H3 F25



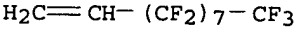
CM 4

CRN 30389-25-4
CMF C12 H3 F21



CM 5

CRN 21652-58-4
CMF C10 H3 F17



CM 6

CRN 111-63-7
CMF C20 H38 O2

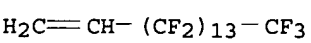
RN 104630-59-3 HCAPLUS
CN 2-Butenedioic acid (2Z)-, dibutyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluoro-1-dodecene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-1-decene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafluoro-1-hexadecene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluoro-1-tetradecene and 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,17,17,18,18,18-tritriacontafluoro-1-octadecene (9CI) (CA INDEX NAME)

CM 1

CRN 104564-29-6
CMF C18 H3 F33

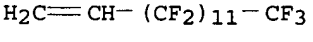
CM 2

CRN 104564-28-5
CMF C16 H3 F29



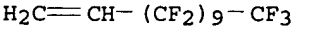
CM 3

CRN 67103-05-3
CMF C14 H3 F25



CM 4

CRN 30389-25-4
CMF C12 H3 F21



CM 5

CRN 21652-58-4

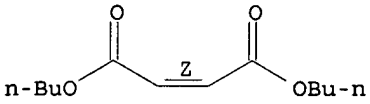
CMF C10 H3 F17

$H_2C{=}CH{-}(CF_2)_7{-}CF_3$

CM 6

CRN 105-76-0
CMF C12 H20 O4

Double bond geometry as shown.



RN 104630-60-6 HCAPLUS
CN 2-Butenedioic acid (2Z)-, dinonyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluoro-1-dodecene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-1-decene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafluoro-1-hexadecene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluoro-1-tetradecene and 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,17,17,18,18,18-tritriacontafluoro-1-octadecene (9CI) (CA INDEX NAME)

CM 1

CRN 104564-29-6
CMF C18 H3 F33

$H_2C{=}CH{-}(CF_2)_{15}{-}CF_3$

CM 2

CRN 104564-28-5
CMF C16 H3 F29

$H_2C{=}CH{-}(CF_2)_{13}{-}CF_3$

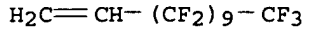
CM 3

CRN 67103-05-3
CMF C14 H3 F25

$H_2C{=}CH{-}(CF_2)_{11}{-}CF_3$

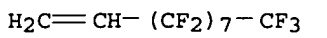
CM 4

CRN 30389-25-4
CMF C12 H3 F21



CM 5

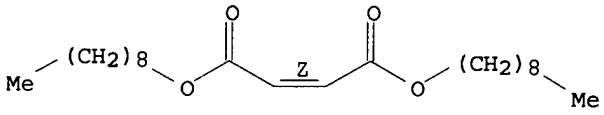
CRN 21652-58-4
CMF C10 H3 F17



CM 6

CRN 2787-64-6
CMF C22 H40 O4

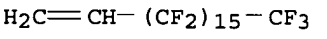
Double bond geometry as shown.



RN 104630-61-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, heptadecyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluoro-1-dodecene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-1-decene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafluoro-1-hexadecene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluoro-1-tetradecene and 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,17,17,18,18,18-tritriacontafluoro-1-octadecene (9CI) (CA INDEX NAME)

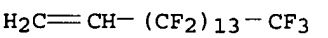
CM 1

CRN 104564-29-6
CMF C18 H3 F33



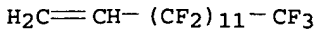
CM 2

CRN 104564-28-5
CMF C16 H3 F29



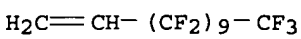
CM 3

CRN 67103-05-3
CMF C14 H3 F25



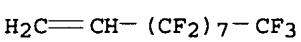
CM 4

CRN 30389-25-4
CMF C12 H3 F21



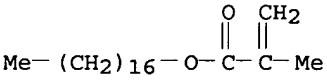
CM 5

CRN 21652-58-4
CMF C10 H3 F17



CM 6

CRN 6140-75-6
CMF C21 H40 O2



IC ICM C08F214-18
ICI C08F214-18, C08F216-14; C08F214-18, C08F218-04; C08F214-18, C08F218-14; C08F214-18, C08F220-12
CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): **40**, **42**
ST perfluoroalkylvinyl polymer **water repellent**; **oil repellent** perfluoroalkylvinyl polymer
IT Polyester **fibers**, uses and miscellaneous
RL: USES (Uses)
(**fabrics**, water and **oil-repellents** for, perfluoroalkylvinyl polymers as)
IT Fluoropolymers
RL: IMF (Industrial manufacture); PREP (Preparation)
(manufacture of, as water- and **oil-repellents**, mold-release agents and nontackifiers)
IT Waterproof materials and **Water-repellent** materials
(perfluoroalkylvinyl polymers for)
IT **Coating materials**
(oil- and **water-repellent**, perfluoroalkylvinyl copolymers as additives for)
IT **104630-54-8P 104630-55-9P 104630-56-0P 104630-57-1P 104630-58-2P 104630-59-3P 104630-60-6P 104630-61-7P**
RL: PREP (Preparation)
(preparation of, as mold-release agent, water and **oil repellent** and non-tackifier)

L114 ANSWER 40 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1976:510229 HCAPLUS

DOCUMENT NUMBER: 85:110229
TITLE: Fluorine and sulfur-containing compositions
INVENTOR(S): Hager, Robert B.; Toukan, Sameeh S.
PATENT ASSIGNEE(S): Pennwalt Corp., USA
SOURCE: U.S., 10 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3948887	A	19760406	US 1974-459258	1974 0408
GB 1437255	A	19760526	GB 1973-38075	1973 0810
FR 2199536	A1	19740412	FR 1973-30750	1973 0824
JP 49059090	A2	19740607	JP 1973-94510	1973 0824
IT 990322	A	19750620	IT 1973-52171	1973 0824
FR 2207934	A1	19740621	FR 1974-1251	1974 0115
FR 2207934	B1	19790323		
FR 2207948	A1	19740621	FR 1974-1252	1974 0115
FR 2207948	B1	19780324		
FR 2207927	A1	19740621	FR 1974-1253	1974 0115
US 3883596	A	19750513	US 1974-459136	1974 0408
US 3899484	A	19750812	US 1974-459144	1974 0408
US 4113748	A	19780912	US 1974-459132	1974 0408

PRIORITY APPLN. INFO.: US 1972-283886 A3 1972 0825

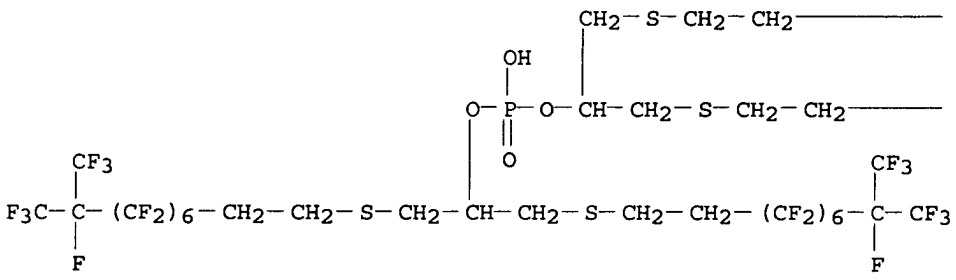
AB The reaction of bis[(fluoroalkylthio)methyl]methanols (adhesion promoters), obtained from perfluoroalkanethiol and epoxide, with 2,4-toluene diisocyanate gave carbamates useful as oil and H2O repellent for leather, **textiles** and paper. Thus, 0.8% bis[perfluoro(7-methyloctyl)ethylthiomethyl]methyl phenyl 4-methyl-1,3-benzenedicarbamate solution in CH3CCl3 was sprayed onto sueded pigskin to give a specimen with 100+ oil and 100-H2O initial repellency rating (AATCC Standard Test method 52-1952).

IT **53122-44-4**
RL: USES (Uses)
(oil and **water repellent**, for paper)

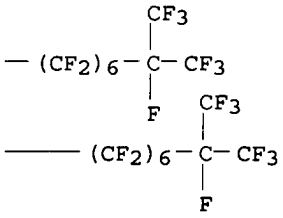
RN 53122-44-4 HCAPLUS
CN 2-Propanol, 1,3-bis[[3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10-

hexadecafluoro-9-(trifluoromethyl)decyl]thio]-, hydrogen phosphate (9CI) (CA INDEX NAME)

PAGE 1-A

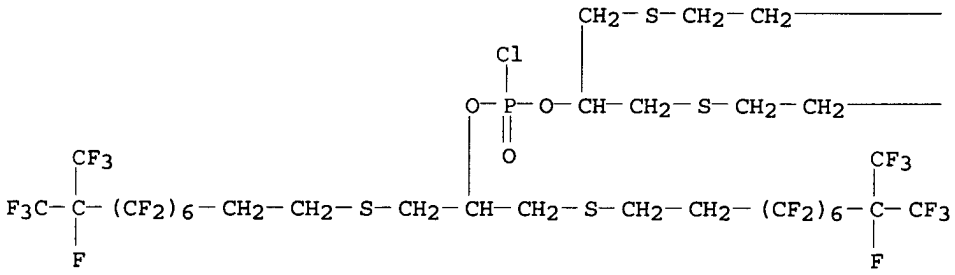


PAGE 1-B

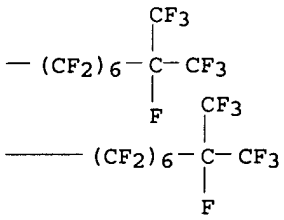


IT **59529-52-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 59529-52-1 HCAPLUS
CN Phosphorochloridic acid, bis[2-[[3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10-hexadecafluoro-9-(trifluoromethyl)decyl]thio]-1-[[[3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10-hexadecafluoro-9-(trifluoromethyl)decyl]thio]methyl]ethyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IT **51-79-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(transesterification of, with bis[(fluoroalkylthio)methyl]methanols)
RN 51-79-6 HCAPLUS
CN Carbamic acid, ethyl ester (8CI, 9CI) (CA INDEX NAME)

IC C07D
INCL 260239000E
CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 39, 41
ST fluoroalkylthiomethyl carbamate **water repellant** ; **oil repellent** fluoroalkylthiomethyl carbamate; leather oil **water repellent**
IT **Oils**
RL: USES (Uses)
(-**repellents**, bis(fluoroalkylthiomethyl)methyl carbamates, for leather and **textiles**)
IT Waterproof materials and **Water-repellent** materials
(bis(fluoroalkylthiomethyl)methyl carbamates, for leather and **textiles**)
IT Leather
Paper
Textiles
(oil and **water repellents** for, bis(fluoroalkylthiomethyl)methyl carbamates as)
IT **Coating materials**
(poly(vinylidene fluoride), containing (fluoroalkylthiomethyl)oxirane, for improved adhesion and flow properties)
IT 41945-92-0
RL: USES (Uses)
(oil and **water repellent** manufacture from)
IT 59544-10-4
RL: USES (Uses)
(oil and **water repellent**, for cotton)
IT 75-55-8D, Aziridine, 2-methyl-, reaction products with bis(nonafluoroundecylthiomethyl)methanol, toluene diisocyanate and trimethylolpropane 100-51-6D, Benzenemethanol, reaction products with bis(nonafluoroundecylthiomethyl)methanol, methylaziridine, toluene diisocyanate and trimethylolpropane 109-89-7D, Ethanamine, N-ethyl-, reaction products with bis(nonafluoroundecylthiomethyl)methanol, methylaziridine, toluene diisocyanate and trimethylolpropane 112-70-9D, 1-Tridecanol, reaction products with bis(fluoroalkylthiomethyl)methanol, ethylenimine, TDI, and trimethylolpropane 151-56-4D, Aziridine,

reaction products with bis(nonafluoroundecylthiomethyl)methanol, heptacosanol, toluene diisocyanate and trimethylolpropane 3710-84-7D, Ethanamine, N-ethyl-N-hydroxy-, reaction products with bis(nonafluoroundecylthiomethyl)methanol, methylaziridine, toluene diisocyanate and trimethylolpropane 52978-10-6D, Ethanol, 2-[[3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10-hexadecafluoro-9-(trifluoromethyl)decyl]thio]-, reaction products with allyl alc., aziridine, and TDI
RL: USES (Uses)
(oil and **water repellent**, for cotton **textiles**)

IT 77-99-6D, 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, reaction products with bis(perfluoroalkylthiomethyl) methanol and toluene diisocyanate 107-18-6D, 2-Propen-1-ol, reaction products with aziridine, bis[(fluoroalkylthio)methyl]methanols, and toluene diisocyanate 584-84-9D, Benzene, 2,4-diisocyanato-1-methyl-, reaction products with bis(perfluoroalkanethiomethyl)methanol and trimethylolpropane
RL: USES (Uses)
(oil and **water repellent**, for leather)

IT 52984-99-3
RL: USES (Uses)
(oil and **water repellent**, for leather and **textiles**)

IT **53122-44-4**
RL: USES (Uses)
(oil and **water repellent**, for paper)

IT 59566-63-1
RL: USES (Uses)
(oil and **water repellent**, for **textiles** and paper)

IT 41946-02-5
RL: USES (Uses)
(oil and **water repellents**, for **textiles**)

IT 59537-50-7
RL: USES (Uses)
(**oil repellent**, for cotton-polyester **fabrics**)

IT 41946-08-1P 41946-09-2P 52978-09-3P 52985-02-1P **59529-52-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

IT **51-79-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(transesterification of, with bis[(fluoroalkylthio)methyl]methanols)

L114 ANSWER 41 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1975:47762 HCAPLUS
DOCUMENT NUMBER: 82:47762
TITLE: Thromboresistant biomedical polymers with fluoroalkyl side chains
INVENTOR(S): Schwarcz, Andor
SOURCE: U.S., 7 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3839743	A	19741008	US 1973-406547	1973

PRIORITY APPLN. INFO.: US 1972-246327 A2 1015 1972 0421

AB The thromboresistant biomedical articles are composed, at least on their surface, of an organic polymer having side chains CnF2n+1CmH2m-, in which n is 1-28 and the sum of n and m is 2-28. The number of fluoroalkyl side chains relative to the number of main chain atoms in 1 recurring unit ranges from 1:2 to 1:10. The polymeric material has another side group chemical bonded to the main chain; the side group is H, halogen, aryl, lower alkyl, or simple anionic groups. Thus, 90 g (0.1 moles) of 1,1-dihydrotritriacontafluoroheptadecyl acrylate and 1.14 g (0.01 moles) of 1-hexanoic acid are copolymd., by using 0.5% azobisisobutyronitrile as the initiator and toluene as the solvent medium. The reaction is carried out at 75-80° for 16 hr to give the copolymer. The intrinsic viscosity measured in hexafluorodimethylbenzene is 0.2. A glass tube is then treated with a 5% trichlorotrifluoroethylene solution of the copolymer by filling the tube, inverting it, and allowing the excess liquid to drain out. After evaporation of the solvent, the coated test tube is sterilized. Five ml of freshly drawn whole blood from the lower vena cava of a rabbit is added and the test tube is periodically tipped to observe clot formation. No evidence of clot formation is observed for several hr. A control test tube, not coated with a layer of the copolymer, is tested in an identical manner and clotting occurs in 7 min.

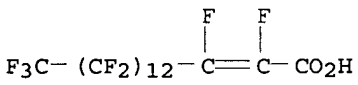
IT **54191-32-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction with silicone rubber)

RN 54191-32-1 HCAPLUS

CN 2-Hexadecenoic acid, 2,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafluoro-, polymer with 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,17,17,18,18-heptatriacontafluoro-18-[(trifluoroethenyl)oxy]octadecane (9CI) (CA INDEX NAME)

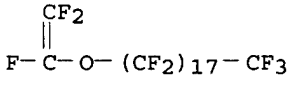
CM 1

CRN 54191-31-0
CMF C16 H F29 O2



CM 2

CRN 54191-30-9
CMF C20 F40 O



IC A61F; A61M
INCL 003001000
CC 63-7 (Pharmaceuticals)
IT **54191-32-1**
RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction with silicone rubber)

L114 ANSWER 42 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1974:553076 HCAPLUS
DOCUMENT NUMBER: 81:153076
TITLE: Sulfur-containing fluorocarbons
INVENTOR(S): Hager, Robert B.; Toukan, Sameeh S.; Walter, Gerald Joseph
PATENT ASSIGNEE(S): Pennwalt Corp.
SOURCE: Ger. Offen., 31 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2342888	A1	19740307	DE 1973-2342888	19730824
GB 1437255	A	19760526	GB 1973-38075	19730810
FR 2199536	A1	19740412	FR 1973-30750	19730824
JP 49059090	A2	19740607	JP 1973-94510	19730824
IT 990322	A	19750620	IT 1973-52171	19730824
FR 2207934	A1	19740621	FR 1974-1251	19740115
FR 2207934	B1	19790323		
FR 2207948	A1	19740621	FR 1974-1252	19740115
FR 2207948	B1	19780324		
FR 2207927	A1	19740621	FR 1974-1253	19740115
US 3883596	A	19750513	US 1974-459136	19740408
US 3899484	A	19750812	US 1974-459144	19740408
US 4113748	A	19780912	US 1974-459132	19740408

PRIORITY APPLN. INFO.: US 1972-283886 A 19720825

AB Bis[[2-[7-(trifluoromethyl)perfluorooctyl]ethylthio]methyl]methanol (I) [40099-98-7], 3-[2-[7-(trifluoromethyl)perfluorooctyl]ethylthio]-1,2-propanediol [41945-92-0], and 2-[2-[7-(trifluoromethyl)perfluorooctyl]ethylthio]ethanol [52978-10-6] were prepared and used in the preparation of urethane, alkyd, acrylate, and other resins useful as oil- and **water-repellent** coatings on leather, **textiles**, etc. Thus, 2-[7-(trifluoromethyl)perfluorooctyl]ethanethiol

[28505-86-4] in EtOH was treated slowly with NaOH and epichlorohydrin [106-89-8] to prepare I which (0.0315 mole) was added to the reaction product of 0.094 mole 2,4-tolylene diisocyanate [584-84-9] and 0.0315 mole trimethylolpropane [77-99-6] to prepare a product, containing isocyanate groups, useful for water- and **oil-repellent** finishing of leather or for further reactions.

IT **53122-44-4P**
RL: PREP (Preparation)
(preparation of)
RN 53122-44-4 HCAPLUS
CN 2-Propanol, 1,3-bis[[3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10-hexadecafluoro-9-(trifluoromethyl)decyl]thio]-, hydrogen phosphate (9CI) (CA INDEX NAME)

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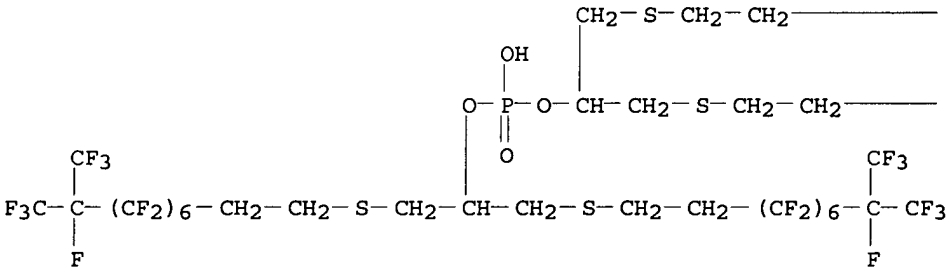
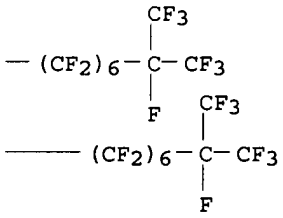


PAGE 1-B

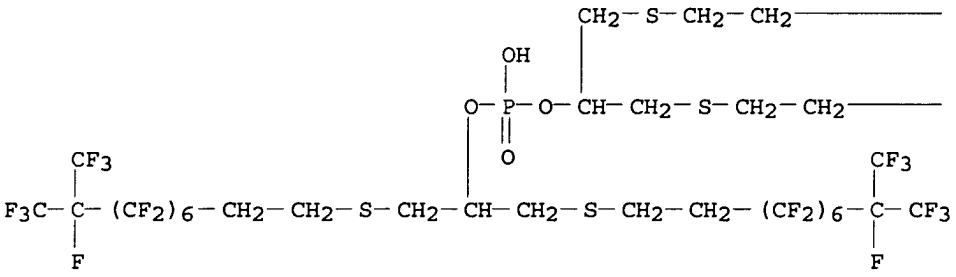


IT **53122-45-5**
RL: USES (Uses)
(solvent-resistant coatings, for paper)
RN 53122-45-5 HCAPLUS
CN 2-Propanol, 1,3-bis[[3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10-hexadecafluoro-9-(trifluoromethyl)decyl]thio]-, hydrogen phosphate, compd. with 2-aminoethanol (1:1) (9CI) (CA INDEX NAME)

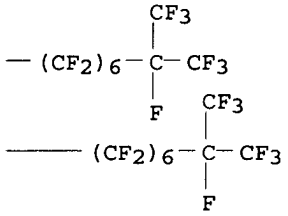
CM 1

CRN 53122-44-4
CMF C50 H27 F76 O4 P S4

PAGE 1-A

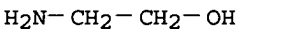


PAGE 1-B

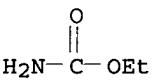


CM 2

CRN 141-43-5
CMF C2 H7 N O



IT **51-79-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(transesterification of, by bis[(perfluoroisononyl)ethylthiomethyl] methanol)
RN 51-79-6 HCAPLUS
CN Carbamic acid, ethyl ester (8CI, 9CI) (CA INDEX NAME)



IC C07C; C07F; C09D; D06M
CC 35-3 (Synthetic High Polymers)
Section cross-reference(s): 23, 41
ST fluroalkylthioalkanol; thioalkanol fluoroalkyl; alc fluoroalkylthioalkyl; **oil repellent** finish; **water repellent** finish; urethane fluoroalkylthioalkanol polymer; alkyd fluoroalkylthioalkanol polymer; acrylate fluoroalkylthioalkyl polymer
IT **Coating materials**
(fluorine-containing acrylate and urethane polymers)
IT Alkyd resins
Urethane polymers, uses and miscellaneous
RL: USES (Uses)

(fluorine-containing, oil- and **water-repellent** finishes, for **textiles**)
IT Waterproofing
(of **textiles** and leather, fluorine-containing resins for)
IT Leather
Textiles
(oil- and **water-repellent**, fluorine-containing resins for)
IT 1,3-Propanediol, 1,3-bis[[3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10-hexadecafluoro-9-(trifluoromethyl)decyl]thio]-, reaction products with carboxylic acids and isocyanates
RL: USES (Uses)
(oil- and **water-repellent** finishes)
IT 2,5-Furandione, polymer with ethene, esters with bis[(perfluoroisononyl)ethylthiomethyl]methanol
Ethene, polymer with 2,5-furandione, esters with bis[(perfluoroisononyl)ethylthiomethyl]methanol
RL: USES (Uses)
(**oil-repellent** finishes, for **textiles**)
IT 52984-96-0 52984-97-1 53041-38-6
RL: USES (Uses)
(fluoroalkylthioalkanol-modified, oil- and **water-repellent** finishes)
IT 77-99-6D, 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, reaction products with tolylene diisocyanate and bis[(perfluoroisononyl)ethylthiomethyl]methanol 584-84-9D, Benzene, 2,4-diisocyanato-1-methyl-, reaction products with trimethylolpropane and bis[(perfluoroisononyl)ethylthiomethyl]methanol 53122-39-7 53122-40-0 53122-41-1 53122-42-2
RL: USES (Uses)
(oil- and **water-repellent** finishes)
IT 41946-02-5 52985-00-9 52985-01-0
RL: USES (Uses)
(oil- and **water-repellent** finishes, for **textiles**)
IT 52984-98-2 52984-99-3 52985-02-1
RL: USES (Uses)
(oil- and water-resistant finishes, for **textiles**)
IT 41946-08-1P 41946-09-2P 52978-09-3P 52978-10-6P 52978-11-7P 53122-43-3P **53122-44-4P**
RL: PREP (Preparation)
(preparation of)
IT **53122-45-5**
RL: USES (Uses)
(solvent-resistant coatings, for paper)
IT **51-79-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(transesterification of, by bis[(perfluoroisononyl)ethylthiomethyl] methanol)

L114 ANSWER 43 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1972:420366 HCAPLUS
DOCUMENT NUMBER: 77:20366
TITLE: Textile-treating polymers of perfluoro esters of fumaric acid and other ethylenically unsaturated polybasic acids
INVENTOR(S): Kleiner, Eduard K.; Knell, Martin
PATENT ASSIGNEE(S): Ciba-Geigy A.-G.
SOURCE: Ger. Offen., 49 pp. Division of Ger. Offen. 1,918,079 (CA 72;22557a).
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 1966209	A1	19720302	DE 1969-1966209	19691129
PRIORITY APPLN. INFO.:			US 1971-199793 A	19711117

AB Oil- and water-repellants are prepared by polymerization of fluoroalkyl esters of unsatd. polybasic acids. Thus, stirring 57.5 parts fumaroyl chloride and 300 parts CF3(CF2)6CH2OH 141 hr at 80-5.deg. gives 169.2 parts bis(1,1-dihydroperfluorooctyl) fumarate (I) [24120-18-1]. Heating 10 parts I and 0.2 part azodicyclohexanecarbonitrile 24 hr at 80.deg. gives I polymer (II) [34978-45-5], glass temperature -15.deg., m.p. 21.deg.. Cotton fabric containing 2% II has oil repellance (3M oil test) 120, H2O repellance (AATCC H2O spray test) 70.

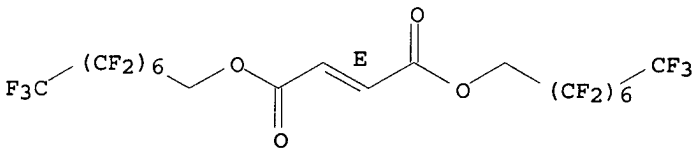
IT **36223-26-4 36223-37-7 36463-54-4 36463-55-5 36463-56-6**
RL: USES (Uses)
(oil- and water-repellents for textiles)

RN 36223-26-4 HCAPLUS
CN 2-Butenedioic acid (2E)-, bis(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctyl) ester, polymer with ethenyl dodecanoate (9CI) (CA INDEX NAME)

CM 1

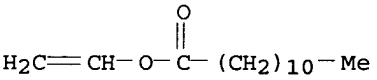
CRN 24120-18-1
CMF C20 H6 F30 O4

Double bond geometry as shown.



CM 2

CRN 2146-71-6
CMF C14 H26 O2

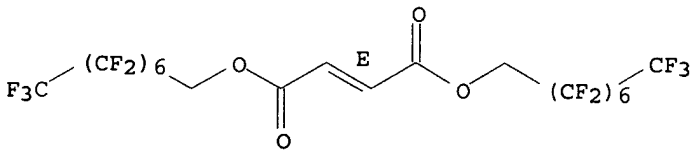


RN 36223-37-7 HCAPLUS
CN 2-Butenedioic acid (2E)-, bis(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctyl) ester, polymer with 1-octadecene (9CI) (CA INDEX NAME)

CM 1

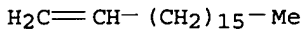
CRN 24120-18-1
CMF C20 H6 F30 O4

Double bond geometry as shown.



CM 2

CRN 112-88-9
CMF C18 H36

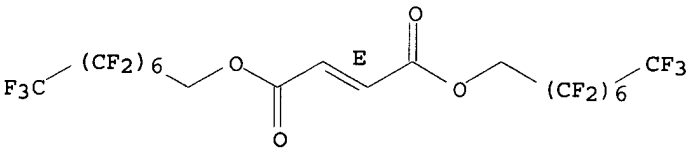


RN 36463-54-4 HCAPLUS
CN 2-Butenedioic acid (2E)-, bis(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctyl) ester, polymer with 1-(ethenyloxy)dodecane (9CI) (CA INDEX NAME)

CM 1

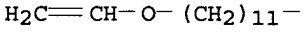
CRN 24120-18-1
CMF C20 H6 F30 O4

Double bond geometry as shown.



CM 2

CRN 765-14-0
CMF C14 H28 O

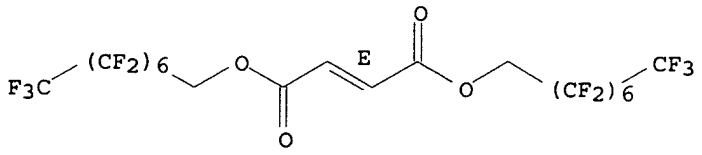


RN 36463-55-5 HCAPLUS
CN 2-Butenedioic acid (2E)-, bis(2,2,3,3,4,4,5,5,6,6,7,7,78,8,8-pentadecafluorooctyl) ester, polymer with 1-(ethenyloxy)hexadecane (9CI) (CA INDEX NAME)

CM 1

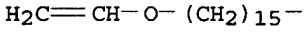
CRN 24120-18-1
CMF C20 H6 F30 O4

Double bond geometry as shown.



CM 2

CRN 822-28-6
CMF C18 H36 O

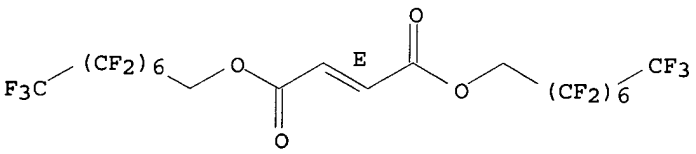


RN 36463-56-6 HCAPLUS
CN 2-Butenedioic acid (2E)-, bis(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctyl) ester, polymer with 1-(ethenyloxy)octadecane (9CI) (CA INDEX NAME)

CM 1

CRN 24120-18-1
CMF C20 H6 F30 O4

Double bond geometry as shown.



CM 2

CRN 930-02-9
CMF C20 H40 O

IC C08F
CC 35-3 (Synthetic High Polymers)
IT 9069-74-3 9069-75-4 9069-76-5 9069-77-6 26338-00-1
26338-01-2 26338-02-3 26338-03-4 26338-04-5 26470-18-8
36201-52-2 36201-53-3 36201-54-4 36201-55-5 36201-56-6
36201-57-7 36223-25-3 **36223-26-4** 36223-27-5
36223-28-6 36223-29-7 36223-30-0 36223-31-1 36223-32-2
36223-33-3 36223-34-4 36223-35-5 36223-36-6
36223-37-7 36223-38-8 36223-39-9 36223-40-2
36223-41-3 36223-42-4 36223-43-5 36223-44-6 36223-45-7
36223-46-8 36223-47-9 36223-48-0 36223-49-1 36427-09-5
36427-18-6 36427-19-7 36427-20-0 36427-21-1 36427-22-2
36427-23-3 36427-24-4 36427-25-5 36427-26-6 36463-42-0
36463-43-1 36463-44-2 36463-45-3 36463-46-4 36463-47-5
36463-48-6 36463-49-7 36463-50-0 36463-51-1 36463-52-2
36463-53-3 **36463-54-4 36463-55-5**
36463-56-6 36463-57-7 36463-58-8 36463-59-9

36463-60-2 36463-61-3 36463-62-4 36463-63-5 36463-64-6
36463-65-7 36463-66-8 36509-77-0
RL: USES (Uses)
(oil- and water-repellents for textiles)

L114 ANSWER 44 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1972:114778 HCAPLUS
DOCUMENT NUMBER: 76:114778
TITLE: Polymerizable perfluoroalkylmonocarboxylic acid esters oil repellents for textiles
PATENT ASSIGNEE(S): CIBA Ltd.
SOURCE: Fr., 41 pp.
CODEN: FRXXAK
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2054241		19710521	FR	
PRIORITY APPLN. INFO.:			CH	1969 0707

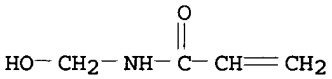
AB The perfluoroalkyl esters were prepared by treating a C4-24 perfluoroalkyl acid with an acyclic aliphatic epoxide. At room temperature, glycidyl methacrylate in perfluorocaprylic acid was treated with NaOAc in EtOAc, and hydroquinone monomethyl ether stabilizer was added to give 2-hydroxy-3-(perfluoroheptylcarbonyloxy)propyl methacrylate [34569-65-8] or 3-hydroxy-2-(perfluoroheptylcarbonyloxy)propyl methacrylate [34578-21-7], which was polymerized in EtOAc containing K2S2O8 catalyst. The polymer solution was used to impregnate cotton, polyamide, and polyester fabrics to leave them oil repellent. Nine other esters were similarly prepared

IT **9071-80-1**
RL: USES (Uses)
(oilproofing agents, for synthetic fibers and textiles)

RN 9071-80-1 HCAPLUS
CN Octadecanoic acid, 9,10-dihydroxy-, ethenyl ester, mono(pentadecafluorooctanoate), polymer with N-(hydroxymethyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 924-42-5
CMF C4 H7 N O2



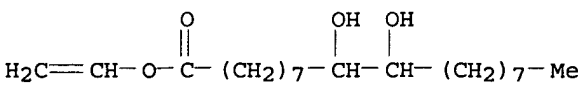
CM 2

CRN 50853-39-9
CMF C28 H37 F15 O5
CCI IDS

CM 3

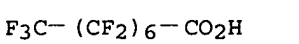
CRN 3195-21-9

CMF C20 H38 O4



CM 4

CRN 335-67-1
CMF C8 H F15 O2



IC C07C; C08F; C06M
CC 39 (Textiles)
IT 9070-70-6 9070-71-7 9070-94-4 9071-19-6 9071-75-4
9071-77-6 **9071-80-1**
RL: USES (Uses)
(oilproofing agents, for synthetic fibers and textiles)

L114 ANSWER 45 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1971:23612 HCAPLUS
DOCUMENT NUMBER: 74:23612
TITLE: Fluorinated organic compounds and their polymers
INVENTOR(S): Hauptschein, Murray; Hager, Robert B.; Allen, Thomas Clark
PATENT ASSIGNEE(S): Pennsalt Chemicals Corp.
SOURCE: Brit., 15 pp.
CODEN: BRXXAA
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

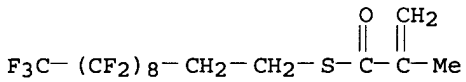
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1211034		19701104	GB	
US 3544663		19700000	US	
PRIORITY APPLN. INFO.:			US	1967 0130

AB Fluorinated organic compds. of the formula RCH2CH2SC(O)C(R1):CH2 (I), where R is C5-13 perfluoroalkyl and R1 is H or Me, and their polymers were prepared and used in textile finishing compns. Thus, methacryloyl chloride was refluxed with a solution of 2-(perfluoro-7-methyloctyl)ethyl mercaptan, Et3N, and hydroquinone, and the salt product was separated, dried, and treated with N,N'-diphenyl-p-phenylenediamine to give 2-(perfluoro-7-methyloctyl)ethyl thiomethacrylate (II). II was polymerized in a solution of Me2CO, methylolacrylamide, deoxygenated H2O, trimethylhexadecylammonium bromide (Acetoquat CTAB) and azodiisobutyramidine dihydrochloride. This fluorinated latex was mixed with a nonfluorinated latex such as poly(n-decyl methacrylate), a creaseproofing resin (Permafresh 183), aqueous Zn(NO3)2, and an extender (Norane F) to give a bath which was used to pad cotton textiles. The padded textiles had good water and oil repellency and retained this repellency after numerous laundering and drying cycles.

IT **30660-63-0**
RL: USES (Uses)
(in waterproofing of textiles)
RN 30660-63-0 HCAPLUS
CN Acrylic acid, 2-methylthio-, S-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-nonadecafluoroundecyl) ester, polymer with hexadecyl vinyl ether (8CI) (CA INDEX NAME)

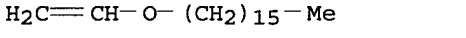
CM 1

CRN 45310-42-7
CMF C15 H9 F19 O S



CM 2

CRN 822-28-6
CMF C18 H36 O



IC C07C
CC 39 (Textiles)
IT 26797-74-0 29320-53-4 30660-58-3 30660-59-4 30660-60-7
30660-61-8 30660-62-9 **30660-63-0** 30661-93-9
RL: USES (Uses)
(in waterproofing of textiles)

L114 ANSWER 46 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1969:514118 HCAPLUS
DOCUMENT NUMBER: 71:114118
TITLE: Emulsifiers for silicones
PATENT ASSIGNEE(S): Henkel und Cie. G.m.b.H.
SOURCE: Fr., 6 pp.
CODEN: FRXXAK
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 1565387		19690502	FR	
DE 1694381			DE	
DE 1694382			DE	
PRIORITY APPLN. INFO.:			DE	1966 1214
			DE	1967 0114

AB HCHO is condensed with dicyandiamide, stearylamine, and HCO2H to prepare an emulsifier which is especially useful for preparing aqueous dispersions of poly(methylsiloxane), poly(dimethylsiloxane), and similar silicones because the emulsifier hardens and loses its

emulsifying activity when the silicone is heated in the presence of a conventional hardening agent [e.g., Zn(NO3)2] for the silicone. Similar hardenable emulsifiers are prepared by the condensation of HCHO or paraformaldehyde with melamine and hydroxystearic acid, with dicyandiamide and stearylbiguanide-HCl, with stearylguanidine-HCl and HCO2H, with dodecylbiguanide, with guanidine-HCl and perfluorononyl-guanidine formate, with cocoamine, HCO2H, and melamine, and with similar compds. The emulsifiers are especially useful for the application of water-repellent and, in some cases, crease-resistant (i.e., containing dimethylolethyleneurea or dimethylolpropyleneurea) silicone coatings to cotton fabrics because the emulsifiers are inactivated during curing and do not adversely affect the adhesion and wash resistance of the coating. Thus, a mixture of 75 g. 30% HCHO solution, 42 g. dicyandiamide, 6.75 g. stearylamine, 12.5 ml. 2N HCl, and 30 g. iso-PrOH was agitated 5 hrs. at 80°, treated during 30 min. with 27.1 g. 85% HCO2H, agitated 1 hr. at 80°, and cooled to give a white paste which (1 part) was dissolved in 74 parts boiling water. The solution was cooled, adjusted to pH 4 with AcOH, homogenized with 15 parts poly(methylsiloxane) (mol. weight 2500) and 7.5 parts iso-PrOH. This stable emulsion (80 ml.) was diluted with 100 ml. water (pH 4), mixed with 720 ml. water (pH 4) containing 0.8 g. SnCl2.2H2O, and applied to cotton poplin fabric (80% wet pickup). After being dried at 100° and cured for 5 min. at 150°, a water-repellent coating having good resistance to washing and scrubbing was obtained.

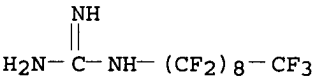
IT **26283-97-6**
RL: USES (Uses)
(reaction products with acids, as hardenable emulsifying agents for siloxanes)

RN 26283-97-6 HCAPLUS

CN Formic acid, compd. with (nonadecafluorononyl)guanidine, polymer with formaldehyde and guanidine (9CI) (CA INDEX NAME)

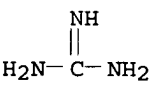
CM 1

CRN 45305-54-2
CMF C10 H4 F19 N3



CM 2

CRN 113-00-8
CMF C H5 N3



CM 3

CRN 64-18-6
CMF C H2 O2

CM 4

CRN 50-00-0
CMF C H2 O

$H_2C{=}O$

IC C08G; D06M
CC 39 (Textiles)
IT 26283-87-4 26283-93-2 26283-94-3 26283-95-4 26283-96-5
26283-97-6 26678-51-3
RL: USES (Uses)
(reaction products with acids, as hardenable emulsifying agents for siloxanes)

=> => d que stat l117
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L3 SCR 1918 OR 1838
L4 STR

C~~C F~Ak~CF3
1 2 3 4 5

NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT IS LIN SAT AT 4
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS M3-X7 C AT 4

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 5

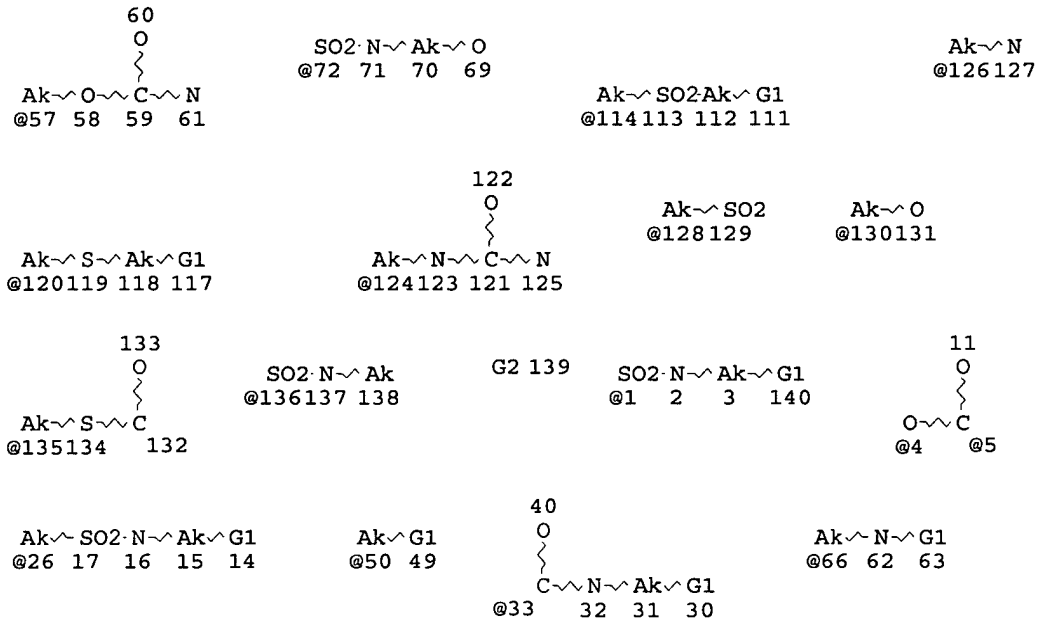
STEREO ATTRIBUTES: NONE
L5 29911 SEA FILE=REGISTRY SSS FUL L4 NOT L3
L6 SCR 1918 OR 1838
L7 STR

C~~C F~Ak~CF3
1 2 3 4 5

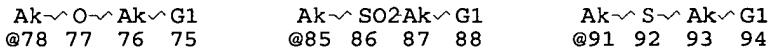
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT IS LIN SAT AT 4
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS M3-X7 C AT 4

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 5

STEREO ATTRIBUTES: NONE
L8 (29911)SEA FILE=REGISTRY SSS FUL L7 NOT L6
L9 STR



Page 1-A



Page 2-A

```
VAR G1=4/5
VAR G2=57/72/114/126/120/124/128/130/135/136/1/26/50/33/66/78/85/91
NODE ATTRIBUTES:
CONNECT IS E1  RC AT  11
CONNECT IS E1  RC AT  40
CONNECT IS E1  RC AT  60
CONNECT IS E2  RC AT  92
CONNECT IS E2  RC AT 119
CONNECT IS E1  RC AT 122
CONNECT IS E1  RC AT 133
CONNECT IS E2  RC AT 134
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  70

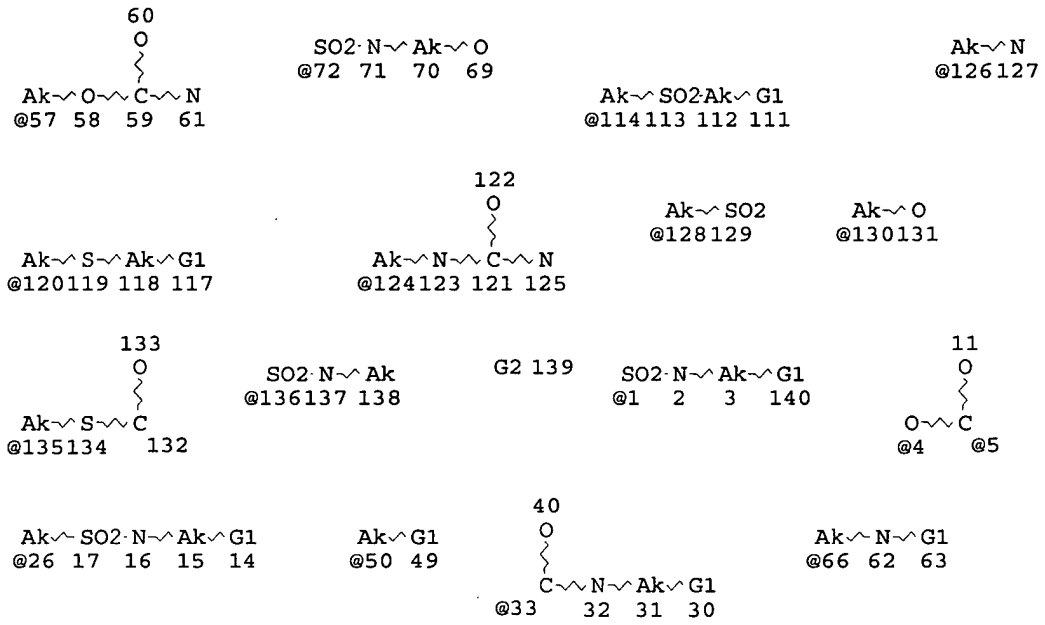
STEREO ATTRIBUTES: NONE
L10       26835 SEA FILE=REGISTRY SUB=L8 SSS FUL L9
L11             SCR 1918 OR 1838
L12             STR
```


```
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT   IS LIN  SAT  AT   4
DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS M3-X7 C  AT   4

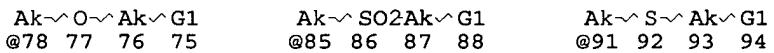
GRAPH ATTRIBUTES:
```

RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 5

STEREO ATTRIBUTES: NONE
L13 (29911)SEA FILE=REGISTRY SSS FUL L12 NOT L11
L14 STR



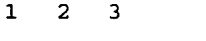
Page 1-A



Page 2-A
VAR G1=4/5
VAR G2=57/72/114/126/120/124/128/130/135/136/1/26/50/33/66/78/85/91
NODE ATTRIBUTES:
CONNECT IS E1 RC AT 11
CONNECT IS E1 RC AT 40
CONNECT IS E1 RC AT 60
CONNECT IS E2 RC AT 92
CONNECT IS E2 RC AT 119
CONNECT IS E1 RC AT 122
CONNECT IS E1 RC AT 133
CONNECT IS E2 RC AT 134
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 70

STEREO ATTRIBUTES: NONE
L15 (26835)SEA FILE=REGISTRY SUB=L13 SSS FUL L14
L16 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

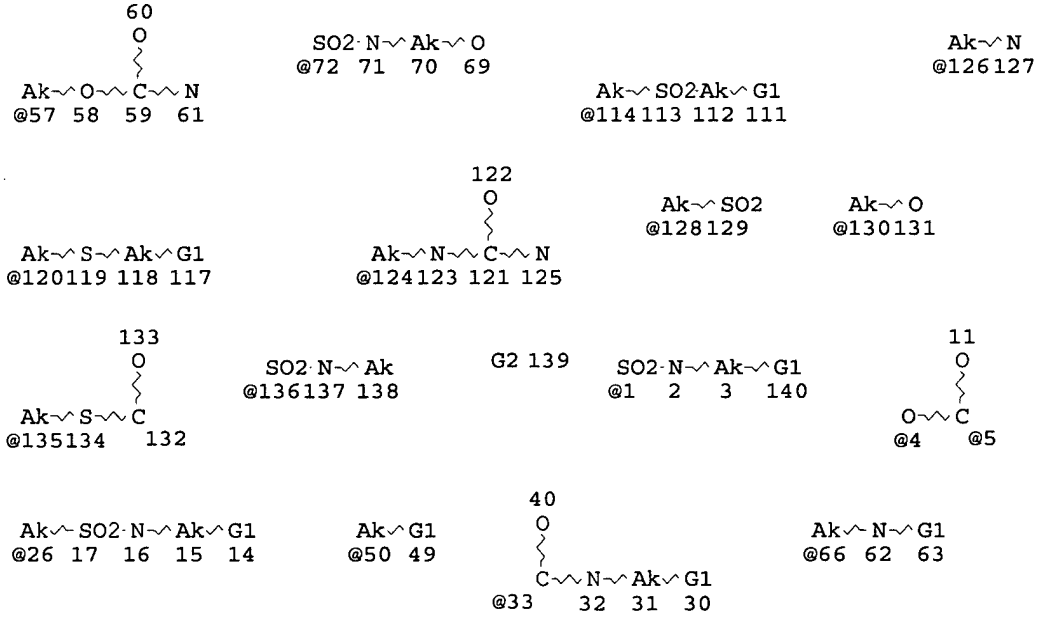
GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 3

STEREO ATTRIBUTES: NONE
L17 715 SEA FILE=REGISTRY SUB=L15 SSS FUL L16
L18 SCR 1918 OR 1838
L19 STR

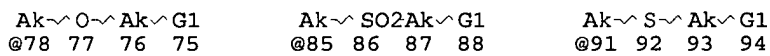
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT IS LIN SAT AT 4
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS M3-X7 C AT 4

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 5

STEREO ATTRIBUTES: NONE
L20 (29911)SEA FILE=REGISTRY SSS FUL L19 NOT L18
L21 STR



Page 1-A



Page 2-A
VAR G1=4/5
VAR G2=57/72/114/126/120/124/128/130/135/136/1/26/50/33/66/78/85/91
NODE ATTRIBUTES:
CONNECT IS E1 RC AT 11
CONNECT IS E1 RC AT 40
CONNECT IS E1 RC AT 60
CONNECT IS E2 RC AT 92
CONNECT IS E2 RC AT 119

```
CONNECT IS E1  RC AT 122
CONNECT IS E1  RC AT 133
CONNECT IS E2  RC AT 134
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  70

STEREO ATTRIBUTES: NONE
L22 (     26835)SEA FILE=REGISTRY SUB=L20 SSS FUL L21
L23             STR
```


```
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   3

STEREO ATTRIBUTES: NONE
L24         4147 SEA FILE=REGISTRY SUB=L22 SSS FUL L23
L26            2 SEA FILE=REGISTRY ABB=ON  PLU=ON  L10 AND L2
L34              STR
```


```
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS M12-X100 C  AT   4

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   4

STEREO ATTRIBUTES: NONE
L36          174 SEA FILE=REGISTRY SUB=L10 SSS FUL L34
L37           20 SEA FILE=REGISTRY ABB=ON  PLU=ON  L36 AND 2/NC
L38         1024 SEA FILE=REGISTRY ABB=ON  PLU=ON  ?URETHAN?/CNS
L39         1028 SEA FILE=REGISTRY ABB=ON  PLU=ON  ?UREYL?/CNS
L40        53690 SEA FILE=REGISTRY ABB=ON  PLU=ON  ?GUANIDIN?/CNS
L41          674 SEA FILE=REGISTRY ABB=ON  PLU=ON  ?CARBODIIMID?/CNS
L43            5 SEA FILE=REGISTRY ABB=ON  PLU=ON  L5 AND (L38 OR L39
                 OR L40 OR L41)
L45            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  104559-01-5/RN
L46            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  852161-27-4/RN
L47            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  112-92-5/RN
L48            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  53200-31-0/RN
L49            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  306997-46-6/RN
L50            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  112-96-9/RN
L54        23393 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L5
L55            5 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L26
L56        18293 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L10
L57          238 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L17
L58         1833 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L24
L59          413 SEA FILE=REGISTRY ABB=ON  PLU=ON  L17 AND L24
L60          121 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L59
L61          165 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L45/D OR L45/DP
L62            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L46/D OR L46/DP
```

```
L63          509 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L47/D OR L47/DP
L64           77 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L48/D OR L48/DP
L65            5 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L49/D OR L49/DP
L66          299 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L50/D OR L50/DP
L67           90 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L36
L68          140 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L57 AND L58
L70           14 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L37
L71            3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L43
L73           64 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L54 AND ((L61 OR L62
                 OR L63 OR L64 OR L65 OR L66))
L74        56395 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L38
L75         3185 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L39
L76       144447 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L40
L77        10203 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L41
L78          387 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L54 AND ((L74 OR L75
                 OR L76 OR L77) OR ?UREYLEN? OR ?URETHANYLBIURETYL? OR
                 ?URETHAN?(A)?BIURIETYL? OR ?GUANIDIN? OR ?CARBODIIMID?)

L80       113402 SEA FILE=HCAPLUS ABB=ON  PLU=ON  FIBER?/SC,SX
L82            3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L67 AND ((L74 OR L75
                 OR L76 OR L77) OR ?UREYLEN? OR ?URETHANYLBIURETYL? OR
                 ?URETHAN?(A)?BIURIETYL? OR ?GUANIDIN? OR ?CARBODIIMID?)

L85            8 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L80 AND L57
L86          140 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L60 OR L68
L87            8 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L86 AND L80
L88       270766 SEA FILE=HCAPLUS ABB=ON  PLU=ON  COAT?/SC,SX
L89            5 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L86 AND L88
L92         7724 SEA FILE=HCAPLUS ABB=ON  PLU=ON  COATINGS/CT
L93       125107 SEA FILE=HCAPLUS ABB=ON  PLU=ON  COATING PROCESS/CT
L94       271789 SEA FILE=HCAPLUS ABB=ON  PLU=ON  COATING MATERIALS/CT
L95         2026 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L56 AND ((L92 OR L93
                 OR L94))
L96        21863 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ANTISOIL? OR (ANTI OR
                 REPEL? OR PREVENT? STOP?)(A)(SOIL? OR DIRT? OR DUST?
                 OR WATER? OR OIL?)
L97         1931 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L96 AND L56
L98          707 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L95 AND L97
L99         3541 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ANTISOIL? OR ANTI(A)SO
                 IL?
L103      301171 SEA FILE=HCAPLUS ABB=ON  PLU=ON  TEXTIL?/SC,SX
L104          99 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L56 AND L88 AND (L103
                 OR L80)
L105           1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L67 AND L88 AND (L103
                 OR L80)
L106             QUE  ABB=ON  PLU=ON  FABRIC? OR TEXTILE? OR CLOTH? OR G
                 ARMENT? OR NAPER OR DRAPER OR WEAV? OR WOVE? OR WEFT? O
                 R WEB? OR SPIN? OR SPUN? OR FIBER? OR FIBRE# OR NET OR
                 NETTING?
L107         147 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L106 AND L98
L108           5 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L78 AND L107
L109           5 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L73 AND L107
L110           1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L67 AND L107
L111          96 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L104 AND L106
L113          15 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L111 AND L99
L114          46 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L55 OR L70 OR L71 OR
                 L82 OR L85 OR L87 OR L89 OR L105 OR (L108 OR L109 OR
                 L110)
L116          57 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L114 OR L113
L117          11 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L116 NOT L114


=> d l117 1-11 ibib abs hitstr hitind

L117 ANSWER 1 OF 11  HCAPLUS  COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:         2003:271885  HCAPLUS
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DOCUMENT NUMBER: 138:305497
TITLE: Water absorption oil-repellent **antisoil** finishing composition and finishing **fiber** products thereof
INVENTOR(S): Tsujimoto, Hiroshi; Miura, Hiroyuki; Sakai, Yoshiaki; Nakaya, Shoji; Kito, Kiyoshi
PATENT ASSIGNEE(S): Shikibo, Ltd., Japan; Takamatsu Yushi K. K.
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

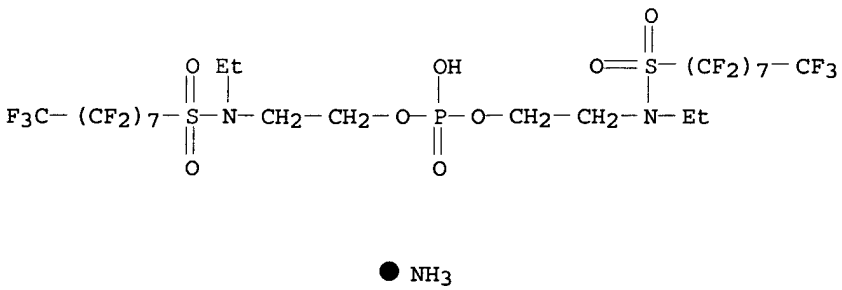
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003105319	A2	20030409	JP 2001-301604	2001 0928

PRIORITY APPLN. INFO.: JP 2001-301604 2001 0928

AB The **fiber** finishing composition, useful for spray containers, comprises (A) 15-90 wt% of copolymers prepared by polymerizing perfluoro alkyl group-containing acrylates and alkoxylated acrylates in the presence of (R1F-A-O)mP:O(OH)n(O-)3-m-n•(Y1+)3-m-n, wherein R1F is a perfluoroalkyl group, A = divalent organic group, m = 1 or 2, n = 0 or 1, Y+ is a counter ion, and (B) 10-85 wt% of terpolymers of perfluoroalkyl group-containing acrylates, alkoxylated acrylates, and nitrogen-containing acrylates. Thus, a composition was prepared by mixing 2-acryloylamino-2-methyl-1-propane sulfonic acid ammonium salt-NK Ester M 230G graft copolymer containing bis(2-perfluorooctylethyl) phosphate ammonium salt and acrylonitrile-nonadecafluoroundecyl methacrylate-NK Ester M 230G graft copolymer.

IT **30381-98-7P**, Bis(2-perfluorooctylsulfonyl-N-ethylaminoethyl) phosphate ammonium salt **146837-02-7P**, 2-Perfluorooctylsulfonyl-N-ethylaminoethyl phosphate ammonium salt
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(production of water absorption oil-repellent **antisoil** finishing composition for finishing **fiber** products)

RN 30381-98-7 HCAPLUS
CN 1-Octanesulfonamide, N,N'-[phosphinicobis(oxy-2,1-ethanediyl)]bis[N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, ammonium salt (9CI) (CA INDEX NAME)

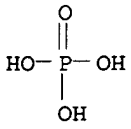


RN 146837-02-7 HCAPLUS
CN 1-Octanesulfonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-(2-hydroxyethyl)-, phosphate (ester), ammonium

salt (9CI) (CA INDEX NAME)

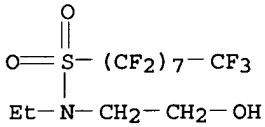
CM 1

CRN 7664-38-2
CMF H3 O4 P



CM 2

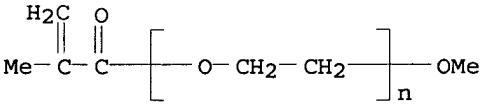
CRN 1691-99-2
CMF C12 H10 F17 N O3 S



IT **507273-20-3P**, Acrylonitrile-nonadecafluoroundecyl methacrylate-NK Ester M 230G graft copolymer **507273-21-4P**, N-Methylolacrylamide-nonadecafluoroundecyl methacrylate-NK Ester M 90G graft copolymer
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(production of water absorption oil-repellent **antisoil** finishing composition for finishing **fiber** products)
RN 507273-20-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-nonadecafluoroundecyl ester, polymer with α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl) and 2-propenenitrile, graft (9CI) (CA INDEX NAME)

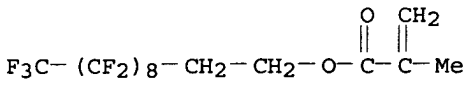
CM 1

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS



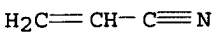
CM 2

CRN 15899-09-9
CMF C15 H9 F19 O2



CM 3

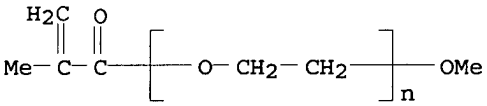
CRN 107-13-1
CMF C3 H3 N



RN 507273-21-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-nonadecafluoroundecyl ester, polymer with N-(hydroxymethyl)-2-propenamide and α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

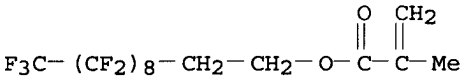
CM 1

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS



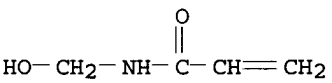
CM 2

CRN 15899-09-9
CMF C15 H9 F19 O2



CM 3

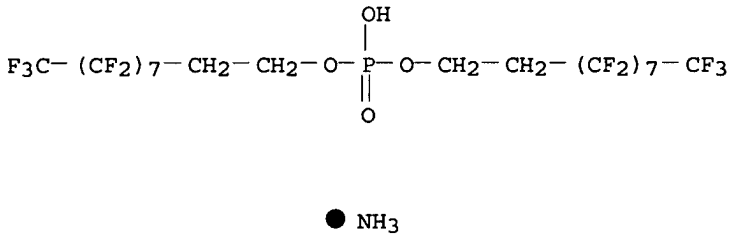
CRN 924-42-5
CMF C4 H7 N O2



IT **93776-20-6P**, Bis(2-perfluorooctylethyl) phosphate ammonium salt **362049-20-5P**, 2-Perfluorooctylethyl phosphate ammonium salt
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(starting materials; production of water absorption oil-repellent

antisoil finishing composition for finishing **fiber** products)

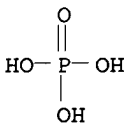
RN 93776-20-6 HCAPLUS
CN 1-Decanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-, hydrogen phosphate, ammonium salt (9CI) (CA INDEX NAME)



RN 362049-20-5 HCAPLUS
CN 1-Decanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-, phosphate, ammonium salt (9CI) (CA INDEX NAME)

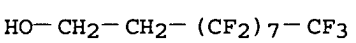
CM 1

CRN 7664-38-2
CMF H3 O4 P



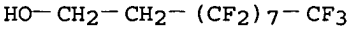
CM 2

CRN 678-39-7
CMF C10 H5 F17 O

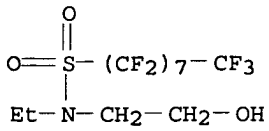


IT **678-39-7**, 2-Perfluorooctylethyl alcohol **1691-99-2**
, 2-Perfluorooctylsulfonyl-N-ethylaminoethyl alcohol
RL: RCT (Reactant); RACT (Reactant or reagent)
(starting materials; production of water absorption oil-repellent **antisoil** finishing composition for finishing **fiber** products)

RN 678-39-7 HCAPLUS
CN 1-Decanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 1691-99-2 HCAPLUS
CN 1-Octanesulfonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-(2-hydroxyethyl)- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



IC ICM C09K003-00
ICS C08L033-14; C08L033-16; C08L033-26; C08L041-00; D06M013-282; D06M015-277
CC 40-9 (**Textiles** and **Fibers**)
Section cross-reference(s): **42**
ST water absorption oil repellent **antisoil** finishing compn **fiber**
IT Coating materials
(**antisoiling**, water-resistant; production of water absorption oil-repellent **antisoil** finishing composition for finishing **fiber** products)
IT Oil-resistant materials
Textiles
(production of water absorption oil-repellent **antisoil** finishing composition for finishing **fiber** products)
IT Fluoropolymers, uses
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(production of water absorption oil-repellent **antisoil** finishing composition for finishing **fiber** products)
IT Containers
(spray; production of water absorption oil-repellent **antisoil** finishing composition for finishing **fiber** products)
IT 2997-92-4, 2,2'-Azobis(2-amidinopropane) dihydrochloride
RL: CAT (Catalyst use); USES (Uses)
(production of water absorption oil-repellent **antisoil** finishing composition for finishing **fiber** products)
IT **30381-98-7P**, Bis(2-perfluorooctylsulfonyl-N-ethylaminoethyl) phosphate ammonium salt **146837-02-7P**, 2-Perfluorooctylsulfonyl-N-ethylaminoethyl phosphate ammonium salt
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(production of water absorption oil-repellent **antisoil** finishing composition for finishing **fiber** products)
IT 507234-19-7P, 2-Acryloylamino-2-methyl-1-propane sulfonic acid ammonium salt-NK Ester M 230G graft copolymer 507234-20-0P **507273-20-3P**, Acrylonitrile-nonadecafluoroundecyl methacrylate-NK Ester M 230G graft copolymer **507273-21-4P**, N-Methylolacrylamide-nonadecafluoroundecyl methacrylate-NK Ester M 90G graft copolymer 507475-82-3P 507475-84-5P, Ethylene oxide-vinylsulfonic acid sodium salt graft copolymer methyl ether 507476-07-5P, Acrylonitrile-ethylene oxide-nonadecafluoroundecyl methacrylate graft copolymer methyl ether 507476-09-7P, N-Methylolacrylamide-ethylene oxide-nonadecafluoroundecyl methacrylate graft copolymer methyl ether
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(production of water absorption oil-repellent **antisoil** finishing composition for finishing **fiber** products)
IT 111-88-6, n-Octylmercaptan
RL: MOA (Modifier or additive use); USES (Uses)
(production of water absorption oil-repellent **antisoil** finishing composition for finishing **fiber** products)
IT 7664-41-7, Ammonia, reactions
RL: RGT (Reagent); RACT (Reactant or reagent)

(production of water absorption oil-repellent **antisoil** finishing composition for finishing **fiber** products)

IT 67-63-0, Isopropyl alcohol, uses 7580-85-0, Ethylene glycol mono-tert-butyl ether
RL: NUU (Other use, unclassified); USES (Uses)
(solvent; production of water absorption oil-repellent **antisoil** finishing composition for finishing **fiber** products)

IT **93776-20-6P**, Bis(2-perfluorooctylethyl) phosphate ammonium salt **362049-20-5P**, 2-Perfluorooctylethyl phosphate ammonium salt
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(starting materials; production of water absorption oil-repellent **antisoil** finishing composition for finishing **fiber** products)

IT **678-39-7**, 2-Perfluorooctylethyl alcohol 1314-56-3, Phosphoric acid anhydride, reactions **1691-99-2**, 2-Perfluorooctylsulfonyl-N-ethylaminoethyl alcohol
RL: RCT (Reactant); RACT (Reactant or reagent)
(starting materials; production of water absorption oil-repellent **antisoil** finishing composition for finishing **fiber** products)

L117 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:173549 HCAPLUS
DOCUMENT NUMBER: 138:225461
TITLE: Aqueous fluorochemical polymer composition for water and oil repellent treatment of masonry and well bores
INVENTOR(S): Fan, Wayne W.; Martin, Steven J.
PATENT ASSIGNEE(S): 3M Innovative Properties Company, USA
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003018508	A1	20030306	WO 2002-US15937	20020516
W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003083448	A1	20030501	US 2001-938188	20010823
US 6689854	B2	20040210		
CA 2459494	AA	20030306	CA 2002-2459494	20020516
EP 1423347	A1	20040602	EP 2002-737011	2002

0516

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2005501138 T2 20050113 JP 2003-523174
2002
0516

US 2004186254 A1 20040923 US 2004-766127
2004
0128

PRIORITY APPLN. INFO.: US 2001-938188 A
2001
0823

WO 2002-US15937 W
2002
0516

AB The present invention provides a water-soluble and shelf-stable aqueous fluorochem. polymeric treatment useful to treat porous substrates to render them repellent to water- and oil-based stains. The treatment comprises a water-soluble or dispersible fluorochem. polymer of formula: -[CR(COXR1Rf)CH2]a[CR(CO(OR2CO)mO-M+)CH2]b[CR(COXR3Si(OR4)3)CH2]c[CRYCH2]d-, in which Rf = C3-6 fluroalkyl; R1 = hydrocarbyl; X = O, N, or S; R2 = short-chain alkylene; m = 0 or 1; M+ = H or mono- or multivalent cation; R3 = hydrocarbyl; R4 = H, Me, Et, or Bu; Y = a non-hydrophilic group; a, b, and c are ≥1, d ≥0, and containing only carbon atoms in the backbone, with a plurality of each of the following groups pendent from the backbone: (a) fluoroaliph. groups, (b) carboxyl-containing groups, (c) silyl groups and optionally (d) other non-hydrophilic groups. Because the water-soluble polymeric treatment of the present invention, and the shelf-stable aqueous solns. thereof, can be applied to porous substrates in aqueous solution, they eliminate the need for environmentally harmful and toxic co-solvents. Particularly when applied to masonry and other siliceous materials, these polymeric treatments can react with the substrate onto which they are applied to form an invisible and water-insol. coating that repels both water and oil, resists soiling, and that cannot be easily washed from the surface of the substrate. Substrates treated with these polymers are thereby durably protected from rain and normal weathering.

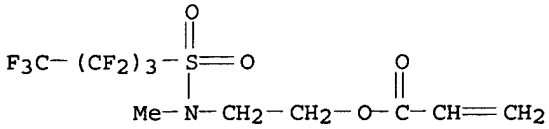
IT **500569-53-9P 500569-54-0P 500569-55-1P**
500569-56-2P 500569-57-3P 500569-58-4P
500569-59-5P 500569-60-8P 500569-61-9P
500569-62-0P 500569-63-1P 500569-64-2P
500569-65-3P 500569-66-4P 500569-67-5P
RL: NUU (Other use, unclassified); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(aqueous treating composition; aqueous fluorochem. polymer composition for water and oil repellent treatment of masonry and well bores and porous materials)

RN 500569-53-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, polymer with 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

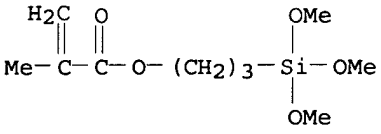
CM 1

CRN 67584-55-8
CMF C10 H10 F9 N O4 S



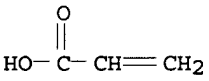
CM 2

CRN 2530-85-0
CMF C10 H20 O5 Si



CM 3

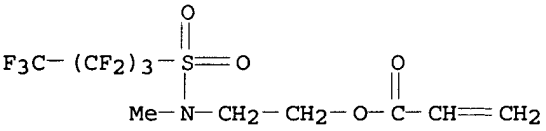
CRN 79-10-7
CMF C3 H4 O2



RN 500569-54-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl 2-propenoate and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

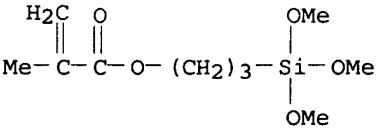
CM 1

CRN 67584-55-8
CMF C10 H10 F9 N O4 S



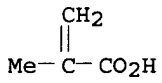
CM 2

CRN 2530-85-0
CMF C10 H20 O5 Si



CM 3

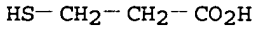
CRN 79-41-4
CMF C4 H6 O2



RN 500569-55-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, telomer with 3-mercaptopropanoic acid, 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 107-96-0
CMF C3 H6 O2 S

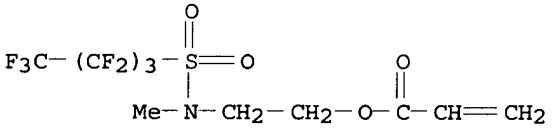


CM 2

CRN 500569-53-9
CMF (C10 H20 O5 Si . C10 H10 F9 N O4 S . C3 H4 O2)x
CCI PMS

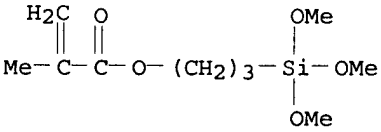
CM 3

CRN 67584-55-8
CMF C10 H10 F9 N O4 S



CM 4

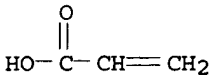
CRN 2530-85-0
CMF C10 H20 O5 Si



CM 5

CRN 79-10-7

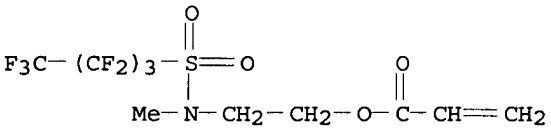
CMF C3 H4 O2



RN 500569-56-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, polymer with butyl 2-propenoate, 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

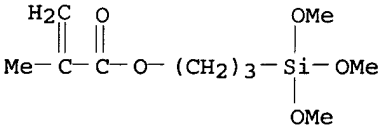
CM 1

CRN 67584-55-8
CMF C10 H10 F9 N O4 S



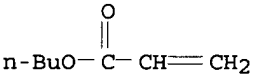
CM 2

CRN 2530-85-0
CMF C10 H20 O5 Si



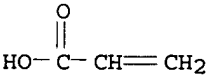
CM 3

CRN 141-32-2
CMF C7 H12 O2



CM 4

CRN 79-10-7
CMF C3 H4 O2

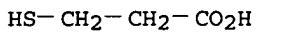


RN 500569-57-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, telomer with butyl 2-propenoate, 3-mercaptopropanoic acid, 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 107-96-0
CMF C3 H6 O2 S

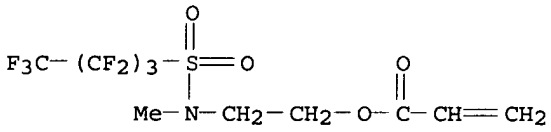


CM 2

CRN 500569-56-2
CMF (C10 H20 O5 Si . C10 H10 F9 N O4 S . C7 H12 O2 . C3 H4 O2)x
CCI PMS

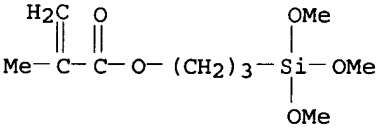
CM 3

CRN 67584-55-8
CMF C10 H10 F9 N O4 S



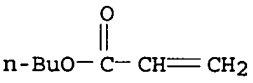
CM 4

CRN 2530-85-0
CMF C10 H20 O5 Si



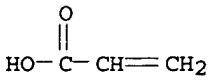
CM 5

CRN 141-32-2
CMF C7 H12 O2



CM 6

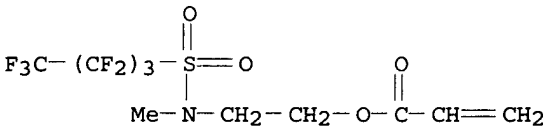
CRN 79-10-7
CMF C3 H4 O2



RN 500569-58-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl 2-propenoate and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

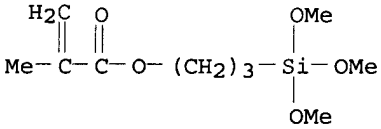
CM 1

CRN 67584-55-8
CMF C10 H10 F9 N O4 S



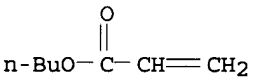
CM 2

CRN 2530-85-0
CMF C10 H20 O5 Si



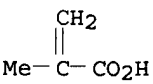
CM 3

CRN 141-32-2
CMF C7 H12 O2



CM 4

CRN 79-41-4
CMF C4 H6 O2

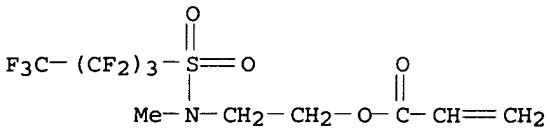


RN 500569-59-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, polymer with dodecyl 2-propenoate, 2-[methyl[(nonafluorobutyl)sulf

onyl]amino]ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

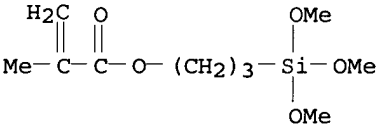
CM 1

CRN 67584-55-8
CMF C10 H10 F9 N O4 S



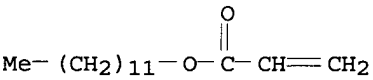
CM 2

CRN 2530-85-0
CMF C10 H20 O5 Si



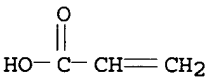
CM 3

CRN 2156-97-0
CMF C15 H28 O2



CM 4

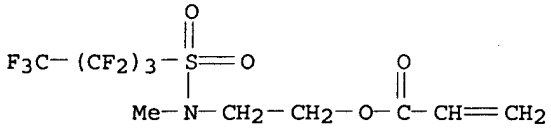
CRN 79-10-7
CMF C3 H4 O2



RN 500569-60-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, polymer with 3-hydroxypropyl 2-propenoate, 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

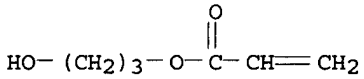
CM 1

CRN 67584-55-8
CMF C10 H10 F9 N O4 S



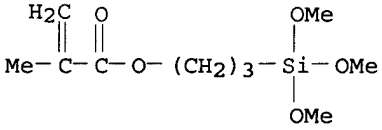
CM 2

CRN 2761-08-2
CMF C6 H10 O3



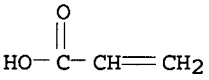
CM 3

CRN 2530-85-0
CMF C10 H20 O5 Si



CM 4

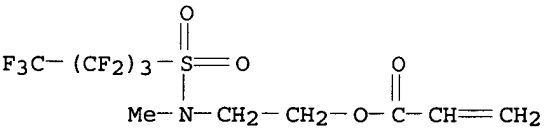
CRN 79-10-7
CMF C3 H4 O2



RN 500569-61-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, polymer with butyl 2-propenoate, 3-hydroxypropyl 2-propenoate, 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

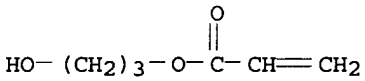
CM 1

CRN 67584-55-8
CMF C10 H10 F9 N O4 S



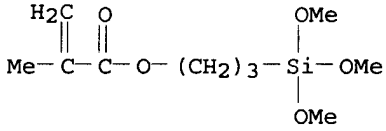
CM 2

CRN 2761-08-2
CMF C6 H10 O3



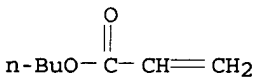
CM 3

CRN 2530-85-0
CMF C10 H20 O5 Si



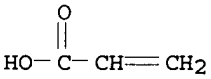
CM 4

CRN 141-32-2
CMF C7 H12 O2



CM 5

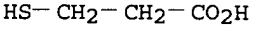
CRN 79-10-7
CMF C3 H4 O2



RN 500569-62-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, telomer with 3-mercaptopropanoic acid, 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl 2-propenoate and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 107-96-0
CMF C3 H6 O2 S

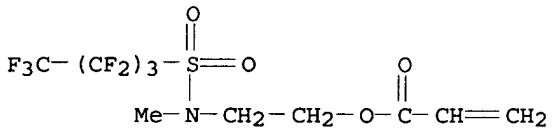


CM 2

CRN 500569-54-0
CMF (C10 H20 O5 Si . C10 H10 F9 N O4 S . C4 H6 O2)x
CCI PMS

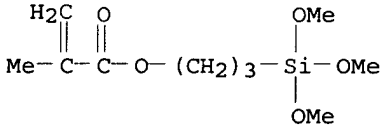
CM 3

CRN 67584-55-8
CMF C10 H10 F9 N O4 S



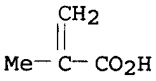
CM 4

CRN 2530-85-0
CMF C10 H20 O5 Si



CM 5

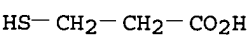
CRN 79-41-4
CMF C4 H6 O2



RN 500569-63-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, telomer with butyl 2-propenoate, 3-mercaptopropanoic acid, 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl 2-propenoate and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 107-96-0
CMF C3 H6 O2 S

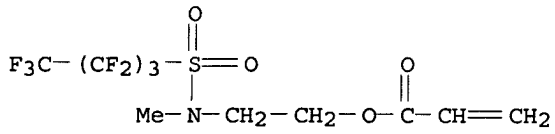


CM 2

CRN 500569-58-4
CMF (C10 H20 O5 Si . C10 H10 F9 N O4 S . C7 H12 O2 . C4 H6 O2)x
CCI PMS

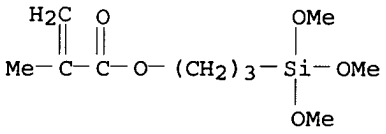
CM 3

CRN 67584-55-8
CMF C10 H10 F9 N O4 S



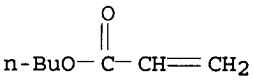
CM 4

CRN 2530-85-0
CMF C10 H20 O5 Si



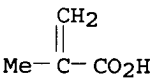
CM 5

CRN 141-32-2
CMF C7 H12 O2



CM 6

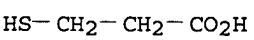
CRN 79-41-4
CMF C4 H6 O2



RN 500569-64-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, telomer with dodecyl 2-propenoate, 3-mercaptopropanoic acid, 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 107-96-0
CMF C3 H6 O2 S

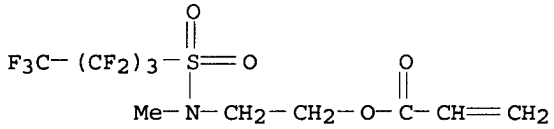


CM 2

CRN 500569-59-5
CMF (C15 H28 O2 . C10 H20 O5 Si . C10 H10 F9 N O4 S . C3 H4 O2)x
CCI PMS

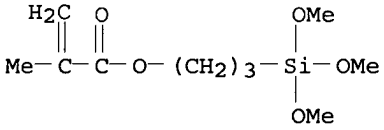
CM 3

CRN 67584-55-8
CMF C10 H10 F9 N O4 S



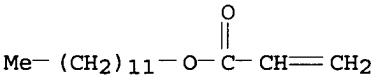
CM 4

CRN 2530-85-0
CMF C10 H20 O5 Si



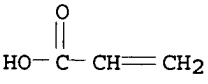
CM 5

CRN 2156-97-0
CMF C15 H28 O2



CM 6

CRN 79-10-7
CMF C3 H4 O2

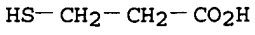


RN 500569-65-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, telomer with 3-hydroxypropyl 2-propenoate, 3-mercaptopropanoic acid, 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 107-96-0

CMF C3 H6 O2 S

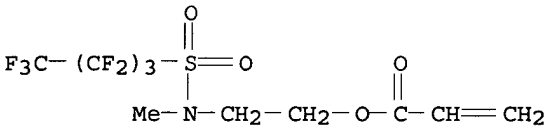


CM 2

CRN 500569-60-8
CMF (C10 H20 O5 Si . C10 H10 F9 N O4 S . C6 H10 O3 . C3 H4 O2)x
CCI PMS

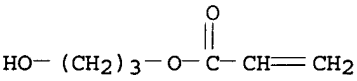
CM 3

CRN 67584-55-8
CMF C10 H10 F9 N O4 S



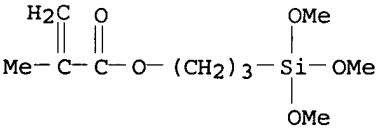
CM 4

CRN 2761-08-2
CMF C6 H10 O3



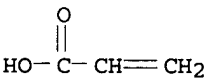
CM 5

CRN 2530-85-0
CMF C10 H20 O5 Si



CM 6

CRN 79-10-7
CMF C3 H4 O2

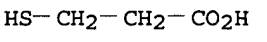


RN 500569-66-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester,

telomer with butyl 2-propenoate, 3-hydroxypropyl 2-propenoate, 3-mercaptopropanoic acid, 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 107-96-0
CMF C3 H6 O2 S

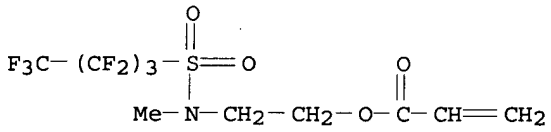


CM 2

CRN 500569-61-9
CMF (C10 H20 O5 Si . C10 H10 F9 N O4 S . C7 H12 O2 . C6 H10 O3 . C3 H4 O2)x
CCI PMS

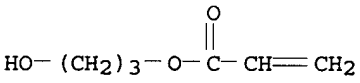
CM 3

CRN 67584-55-8
CMF C10 H10 F9 N O4 S



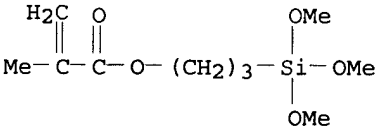
CM 4

CRN 2761-08-2
CMF C6 H10 O3



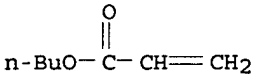
CM 5

CRN 2530-85-0
CMF C10 H20 O5 Si



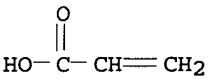
CM 6

CRN 141-32-2
CMF C7 H12 O2



CM 7

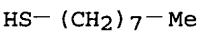
CRN 79-10-7
CMF C3 H4 O2



RN 500569-67-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, telomer with 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl 2-propenoate, 1-octanethiol and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 111-88-6
CMF C8 H18 S

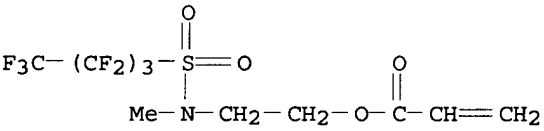


CM 2

CRN 500569-53-9
CMF (C10 H20 O5 Si . C10 H10 F9 N O4 S . C3 H4 O2)x
CCI PMS

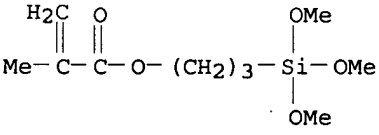
CM 3

CRN 67584-55-8
CMF C10 H10 F9 N O4 S



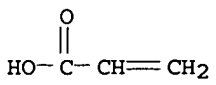
CM 4

CRN 2530-85-0
CMF C10 H20 O5 Si



CM 5

CRN 79-10-7
CMF C3 H4 O2



IC ICM C04B041-48
ICS C08F220-24; E21B043-25
CC 58-4 (Cement, Concrete, and Related Building Materials)
Section cross-reference(s): 38, **40**, **42**, 45, 51, 61
IT Coating materials
(**antisoiling**, water-resistant, aqueous fluorochem. polymers; aqueous fluorochem. polymer composition for water and oil repellent treatment of masonry and well bores and porous materials)
IT Coating materials
(**antisoiling**, weather-resistant, aqueous fluorochem. polymers; aqueous fluorochem. polymer composition for water and oil repellent treatment of masonry and well bores and porous materials)
IT Environmental pollution control
Leather
Masonry
Porous materials
Soilproofing
Textiles
Tiles
Wells
Wettability
(aqueous fluorochem. polymer composition for water and oil repellent treatment of masonry and well bores and porous materials)
IT **500569-53-9P 500569-54-0P 500569-55-1P**
500569-56-2P 500569-57-3P 500569-58-4P
500569-59-5P 500569-60-8P 500569-61-9P
500569-62-0P 500569-63-1P 500569-64-2P
500569-65-3P 500569-66-4P 500569-67-5P
RL: NUU (Other use, unclassified); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(aqueous treating composition; aqueous fluorochem. polymer composition for water and oil repellent treatment of masonry and well bores and porous materials)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L117 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:944841 HCAPLUS
DOCUMENT NUMBER: 138:25868
TITLE: Water- and oilproofing compositions with long service life
INVENTOR(S): Maekawa, Takashige; Shindo, Minako; Tada, Masako
PATENT ASSIGNEE(S): Asahi Glass Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002356671	A2	20021213	JP 2001-164821	2001 0531
PRIORITY APPLN. INFO.:			JP 2001-164821	2001 0531

AB The compns. useful for **fabric** finishing, are obtained from copolymers of (A) monomers bearing polyfluoroalkyl Rf groups rendering microcryst. m.p. of >100° to its homopolymer, e.g. (meth)acrylate C>10 linear fluoroalkyl esters, and (B) monomers bearing polyfluoroalkyl Rf groups which do not have microcryst. m.p. or have a homopolymer microcryst. m.p. of <30°, e.g. (meth)acrylate C>6 linear fluoroalkyl esters. Thus, heating C6F13C2H4OCOCH:CH2 (no homopolymer microcryst. m.p.) 1.45 with C10F21C2H4OCOCH:CH2 (homopolymer microcryst. m.p. 125°) 12.25, stearyl acrylate 20.21, hydroxyethyl acrylate 0.69, polyethylene glycol monomethacrylate 0.69, polyethylene glycol octylphenyl ether 20% aqueous solution 13.78, stearyltriethylammonium chloride 10% aqueous solution 6.89, water 25.83, acetone 17.23, stearyl mercaptan 0.18 and 2,2'-azobis(2-methylpropionamidine) dihydrochloride 0.07 g at 60° for 12 h gave a copolymer solution useful for **fabric** finishing.

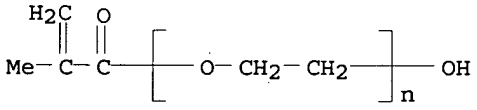
IT **478034-20-7P 478034-21-8P 478034-22-9P**
478034-23-0P 478034-24-1P 478034-25-2P
478034-26-3P 478034-27-4P 478034-28-5P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(manufacture of water- and oilproofing compns. with long service life for **fabric** finishing)

RN 478034-20-7 HCAPLUS

CN 2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl ester, polymer with 2-hydroxyethyl 2-propenoate, α-(2-methyl-1-oxo-2-propenyl)-ω-hydroxypoly(oxy-1,2-ethanediyl), octadecyl 2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl 2-propenoate, graft (9CI) (CA INDEX NAME)

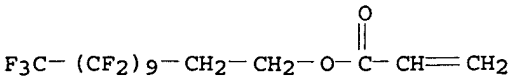
CM 1

CRN 25736-86-1
CMF (C2 H4 O)n C4 H6 O2
CCI PMS



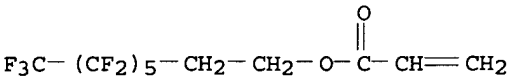
CM 2

CRN 17741-60-5
CMF C15 H7 F21 O2



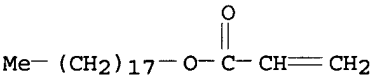
CM 3

CRN 17527-29-6
CMF C11 H7 F13 O2



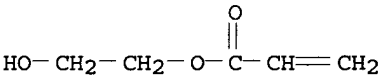
CM 4

CRN 4813-57-4
CMF C21 H40 O2



CM 5

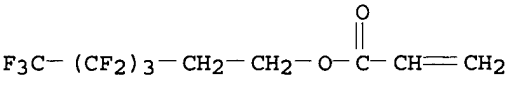
CRN 818-61-1
CMF C5 H8 O3



RN 478034-21-8 HCAPLUS
CN 2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl ester, polymer with 2-hydroxyethyl 2-propenoate, α-(2-methyl-1-oxo-2-propenyl)-ω-hydroxypoly(oxy-1,2-ethanediyl), 3,3,4,4,5,5,6,6,6-nonafluorohexyl 2-propenoate and octadecyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

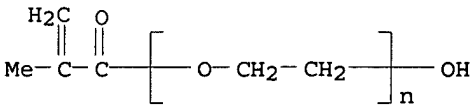
CRN 52591-27-2
CMF C9 H7 F9 O2



CM 2

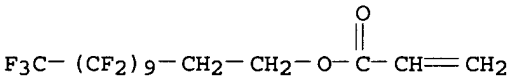
CRN 25736-86-1
CMF (C2 H4 O)n C4 H6 O2

CCI PMS



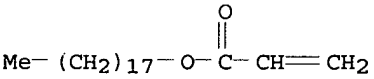
CM 3

CRN 17741-60-5
CMF C15 H7 F21 O2



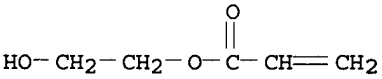
CM 4

CRN 4813-57-4
CMF C21 H40 O2



CM 5

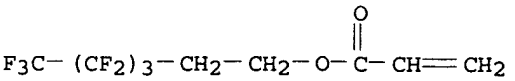
CRN 818-61-1
CMF C5 H8 O3



RN 478034-22-9 HCAPLUS
CN 2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl ester, polymer with 2-hydroxyethyl 2-propenoate, α-(2-methyl-1-oxo-2-propenyl)-ω-hydroxypoly(oxy-1,2-ethanediyl), 3,3,4,4,5,5,6,6,6-nonafluorohexyl 2-propenoate, octadecyl 2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluorotetradecyl 2-propenoate, graft (9CI) (CA INDEX NAME)

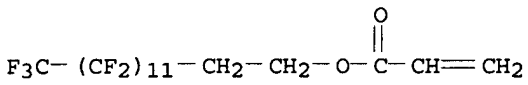
CM 1

CRN 52591-27-2
CMF C9 H7 F9 O2



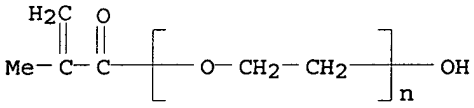
CM 2

CRN 34395-24-9
CMF C17 H7 F25 O2



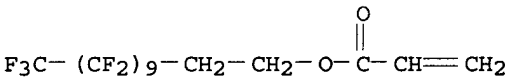
CM 3

CRN 25736-86-1
CMF (C2 H4 O)n C4 H6 O2
CCI PMS



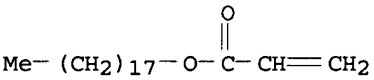
CM 4

CRN 17741-60-5
CMF C15 H7 F21 O2



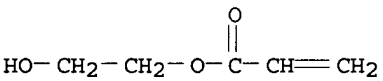
CM 5

CRN 4813-57-4
CMF C21 H40 O2



CM 6

CRN 818-61-1
CMF C5 H8 O3

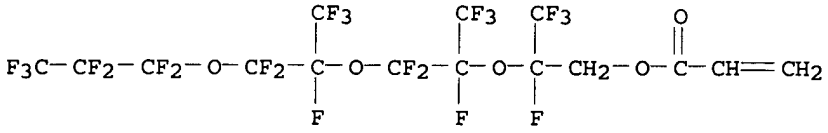


RN 478034-23-0 HCAPLUS
CN 2-Propenoic acid, 2-[1-[[1-[difluoro(heptafluoropropoxy)methyl]-1,2,2,2-tetrafluoroethoxy]difluoromethyl]-1,2,2,2-tetrafluoroethoxy]-2,3,3,3-tetrafluoropropyl ester, polymer with

3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl 2-propenoate, 2-hydroxyethyl 2-propenoate, α-(2-methyl-1-oxo-2-propenyl)-ω-hydroxypoly(oxy-1,2-ethanediyl) and octadecyl 2-propenoate, graft (9CI) (CA INDEX NAME)

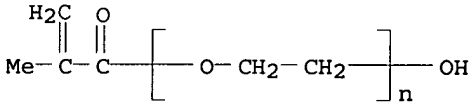
CM 1

CRN 472960-49-9
CMF C15 H5 F23 O5



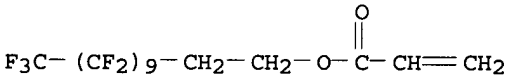
CM 2

CRN 25736-86-1
CMF (C2 H4 O)n C4 H6 O2
CCI PMS



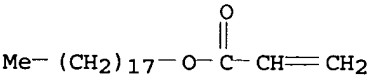
CM 3

CRN 17741-60-5
CMF C15 H7 F21 O2



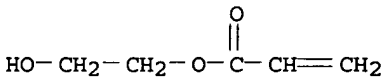
CM 4

CRN 4813-57-4
CMF C21 H40 O2



CM 5

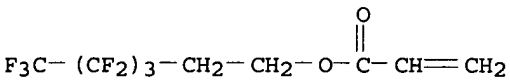
CRN 818-61-1
CMF C5 H8 O3



RN 478034-24-1 HCAPLUS
CN 2-Butenedioic acid (2Z)-, bis(2-ethylhexyl) ester, polymer with N-(hydroxymethyl)-2-propenamide, 3,3,4,4,5,5,6,6,6-nonafluorohexyl 2-propenoate, α-(9Z)-9-octadecenyl-ω-hydroxypoly(oxy-1,2-ethanediyl) and 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl 2-propenoate, graft (9CI) (CA INDEX NAME)

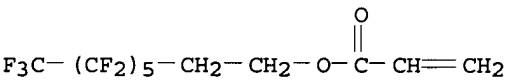
CM 1

CRN 52591-27-2
CMF C9 H7 F9 O2



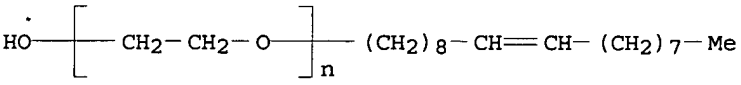
CM 2

CRN 17527-29-6
CMF C11 H7 F13 O2



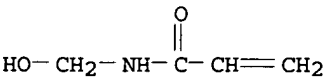
CM 3

CRN 9004-98-2
CMF (C2 H4 O)n C18 H36 O
CCI PMS



CM 4

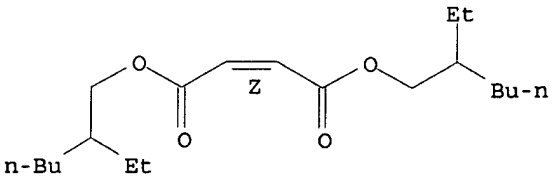
CRN 924-42-5
CMF C4 H7 N O2



CM 5

CRN 142-16-5
CMF C20 H36 O4

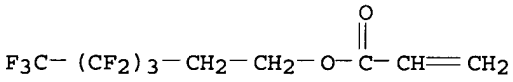
Double bond geometry as shown.



RN 478034-25-2 HCAPLUS
CN 2-Butenedioic acid (2Z)-, bis(2-ethylhexyl) ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl 2-propenoate, N-(hydroxymethyl)-2-propenamide, 3,3,4,4,5,5,6,6,6-nonafluorohexyl 2-propenoate and α-(9Z)-9-octadecenyl-ω-hydroxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

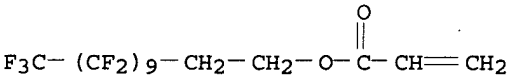
CM 1

CRN 52591-27-2
CMF C9 H7 F9 O2



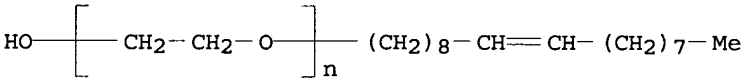
CM 2

CRN 17741-60-5
CMF C15 H7 F21 O2



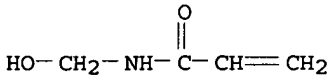
CM 3

CRN 9004-98-2
CMF (C2 H4 O)n C18 H36 O
CCI PMS



CM 4

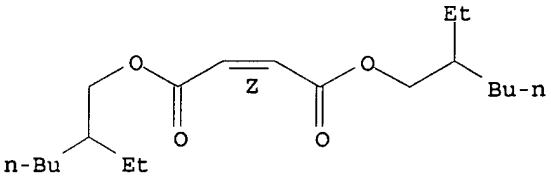
CRN 924-42-5
CMF C4 H7 N O2



CM 5

CRN 142-16-5
CMF C20 H36 O4

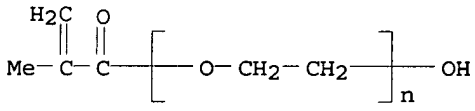
Double bond geometry as shown.



RN 478034-26-3 HCAPLUS
CN 2-Propenoic acid, 2-hydroxyethyl ester, polymer with α-(2-methyl-1-oxo-2-propenyl)-ω-hydroxypoly(oxy-1,2-ethanediyl), octadecyl 2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl 2-propenoate, graft (9CI) (CA INDEX NAME)

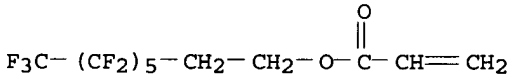
CM 1

CRN 25736-86-1
CMF (C2 H4 O)n C4 H6 O2
CCI PMS



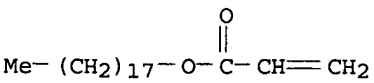
CM 2

CRN 17527-29-6
CMF C11 H7 F13 O2



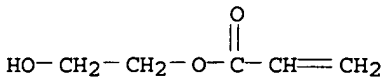
CM 3

CRN 4813-57-4
CMF C21 H40 O2



CM 4

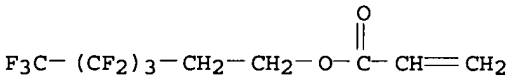
CRN 818-61-1
CMF C5 H8 O3



RN 478034-27-4 HCAPLUS
CN 2-Propenoic acid, 2-hydroxyethyl ester, polymer with α-(2-methyl-1-oxo-2-propenyl)-ω-hydroxypoly(oxy-1,2-ethanediyl), 3,3,4,4,5,5,6,6,6-nonafluorohexyl 2-propenoate and octadecyl 2-propenoate, graft (9CI) (CA INDEX NAME)

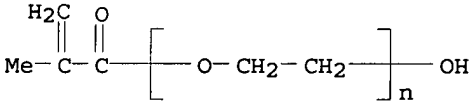
CM 1

CRN 52591-27-2
CMF C9 H7 F9 O2



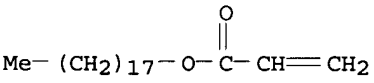
CM 2

CRN 25736-86-1
CMF (C2 H4 O)n C4 H6 O2
CCI PMS



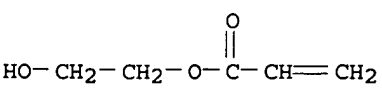
CM 3

CRN 4813-57-4
CMF C21 H40 O2



CM 4

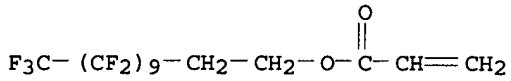
CRN 818-61-1
CMF C5 H8 O3



RN 478034-28-5 HCAPLUS
CN 2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl ester, polymer with octadecyl 2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl 2-propenoate, graft (9CI) (CA INDEX NAME)

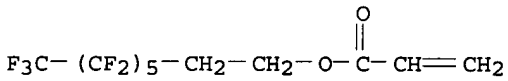
CM 1

CRN 17741-60-5
CMF C15 H7 F21 O2



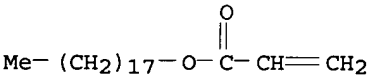
CM 2

CRN 17527-29-6
CMF C11 H7 F13 O2



CM 3

CRN 4813-57-4
CMF C21 H40 O2



IC ICM C09K003-18
ICS C09K003-18; C08F220-24; C09D171-00; C09D201-04; C09K003-00
CC 42-10 (**Coatings**, Inks, and Related Products)
Section cross-reference(s): **40**
ST **fabric** finishing waterproofing oilproofing coating fluoroalkyl acrylate copolymer manuf
IT Coating materials
(**antisoiling**; manufacture of water- and oilproofing compns. with long service life for **fabric** finishing)
IT Polyester **fibers**, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(**fabrics**, treatment of; manufacture of water- and oilproofing compns. with long service life for **fabric** finishing)
IT **478034-20-7P 478034-21-8P 478034-22-9P**
478034-23-0P 478034-24-1P 478034-25-2P
478034-26-3P 478034-27-4P 478034-28-5P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(manufacture of water- and oilproofing compns. with long service life for **fabric** finishing)

L117 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:661370 HCAPLUS

DOCUMENT NUMBER: 135:212420
TITLE: Fluorine compounds and water- and oil-repellant compositions containing them for prevention of soiling of a surface
INVENTOR(S): Shindo, Minako; Maekawa, Takashige; Seki, Ryuji; Furuta, Shoji; Oharu, Kazuya
PATENT ASSIGNEE(S): Asahi Glass Company, Limited, Japan
SOURCE: PCT Int. Appl., 24 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001064619	A1	20010907	WO 2001-JP1425	2001 0226
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2368575	AA	20010907	CA 2001-2368575	2001 0226
EP 1174417	A1	20020123	EP 2001-906315	2001 0226
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 2002060304	A1	20020523	US 2001-976435	2001 1015
US 6860926	B2	20050301		
PRIORITY APPLN. INFO.:			JP 2000-54069 A	2000 0229
			WO 2001-JP1425 W	2001 0226

OTHER SOURCE(S): MARPAT 135:212420

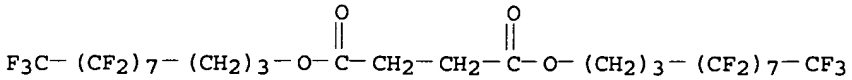
AB The compds. are of perfluorinated group-containing butanedioic acid esters, i.e., Rf1R2OCOCH2CHR1COOR3Rf2o (Rf1, Rf2 = independently polyfluoroalkyl having 3 to 22 carbon atoms; R1 = H or C1-10 alkyl; and R2, R3 = independently C1-4 alkyl or the like). Oil- and water-repellent compns. containing the compds. have good precipitation resistance. Thus, heating F(CF2)8(CH2)2OH (94% purity) 278 with p-toluenesulfonic acid 1.5 and succinic acid 36.5 in PhMe 400 g at 107° for 12 h and working up gave an ester 30 g of which was combined with a perfluoro-C6-16 alkylethyl acrylate 167, stearyl acrylate 46.2, N-methylolacrylamide 5.1, stearyl mercaptan 0.77, polyethylene glycol monooleyl ether 10.3, an acetylenic surfactant 5.1, Nikkol BT 12 (a surfactant)5.1, tripropylene glycol 130 and water 350, emulsified, mixed with azobis(dimethyleneisobutyramidine) HCl salt 0.5 and vinyl chloride

38.5 g and heated while stirring at 60° for 15 h to give an emulsion containing 38.5% polymer particles with average diameter 0.09 μm. A 2%-solids dilution of the emulsion in water was prepared and used as dry soil repellent for nylon knitted **fabric**.

IT **357921-70-1P**
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(fluorine compds. and water- and oil-repellent compns. containing them for prevention of soiling of a surface)

RN 357921-70-1 HCAPLUS

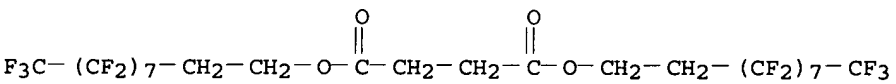
CN Butanedioic acid, bis(4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoroundecyl) ester (9CI) (CA INDEX NAME)



IT **261928-47-6P**
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(oil and water repellent; fluorine compds. and water- and oil-repellent compns. containing them for prevention of soiling of a surface)

RN 261928-47-6 HCAPLUS

CN Butanedioic acid, bis(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl) ester (9CI) (CA INDEX NAME)



IC ICM C07C069-63
ICS C07C311-24; C09K003-18

CC 42-10 (**Coatings**, Inks, and Related Products)
Section cross-reference(s): **40**

ST **fabric** soilproofing fluoro chem oil water repellent; succinic acid perfluoroalkylethyl ester oil water repellent; fluoropolymer acrylic soilproofing coating perfluoroalkylethyl ester additive

IT Coating materials
(**antisoiling**; fluorine compds. and water- and oil-repellent compns. containing them for prevention of soiling of a surface)

IT **Textiles**
(treatment of; fluorine compds. and water- and oil-repellent compns. containing them for prevention of soiling of a surface)

IT 64-17-5DP, Ethanol, perfluoroalkyl-substituted, esters with succinic dichloride, uses 108-30-5DP, Succinic anhydride, diester with ethanolmethylperfluoroalkylsulfamide 109-83-1DP, N-Methylethanolamine, perfluoroalkylsulfamide, diesters with succinic anhydride 110-73-6DP, N-Ethylethanolamine, perfluoroalkylsulfamide, diesters with succinic anhydride 543-20-4DP, Succinic dichloride, diester with perfluoroalkyl-substituted ethanol **357921-70-1P**
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(fluorine compds. and water- and oil-repellent compns. containing them for prevention of soiling of a surface)

IT **261928-47-6P**
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(oil and water repellent; fluorine compds. and water- and

oil-repellent compns. containing them for prevention of soiling of a surface)

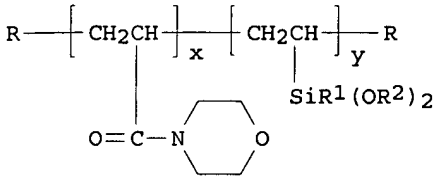
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L117 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:36017 HCAPLUS
DOCUMENT NUMBER: 128:141483
TITLE: Acryloylmorpholine-substituted acrylic fluorosilicone oligomeric functionality modifiers
INVENTOR(S): Yasue, Toshio; Sawada, Hideo
PATENT ASSIGNEE(S): Showa Denko K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10007742	A2	19980113	JP 1996-160267	1996 0620

PRIORITY APPLN. INFO.: JP 1996-160267 1996 0620

GI



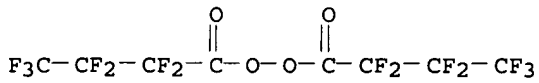
I

AB The modifiers, used for treatments of **fibers**, paper, and polymer and glass surfaces, contain acryloylmorpholine-substituted fluorosilicone oligomers I [R = (CF2)nF, CF(CF3)O[CF2(CF3)O]mC3F7; n = 1-15; m = 0-6; x, y ≥1; R1 = lower alkyl, lower alkoxy; R2 = lower alkyl]. Thus, di(perfluorobutyryl) peroxide 21.3, trimethoxyvinylsilane 2.22, and acryloylmorpholine 2.12 g were treated at 45° for 3 h in AK 225 to give I (R = F7C3), 1 part of which was mixed with 100 parts PhMe solution of Bu acrylate-Et acrylate-acrylonitrile-2-hydroxyethyl methacrylate copolymer (solid content 22%) and 10 parts DMF to give a **fiber**-treating agent. A solution containing thus obtained treating agent, 2,4,6-tri(N-methoxymethyl, N-methyl)amino-1,3,5-triazine, alkylbenzenesulfonic acids, and PhMe was applied on a nylon **woven fabric** and treated at 110-160° for 2 h to give a treated **fabric** showing good water and oil repellency.

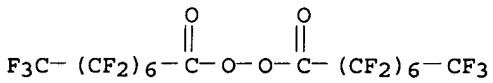
IT **336-64-1DP**, Di(perfluorobutyryl) peroxide, reaction products with acryloylmorpholine-vinylmethoxysilane oligomer **34434-27-0DP**, Bis(perfluorooctanoyl) peroxide, reaction products with acryloylmorpholine-vinylmethoxysilane oligomer **42514-14-7DP**, Di(perfluoroheptanoyl) peroxide, reaction products with acryloylmorpholine-vinylmethoxysilane oligomer

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acryloylmorpholine-substituted acrylic fluorosilicone oligomeric functionality modifiers for polymers, **fibers**, paper, and glass)

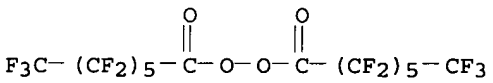
RN 336-64-1 HCAPLUS
CN Peroxide, bis(2,2,3,3,4,4,4-heptafluoro-1-oxobutyl) (9CI) (CA INDEX NAME)



RN 34434-27-0 HCAPLUS
CN Peroxide, bis(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-oxooctyl) (9CI) (CA INDEX NAME)



RN 42514-14-7 HCAPLUS
CN Peroxide, bis(2,2,3,3,4,4,5,5,6,6,7,7,7-tridecafluoro-1-oxoheptyl) (9CI) (CA INDEX NAME)



IC ICM C08F230-08
ICS C08F220-58; C09D005-00; C09D133-26; C09D143-04; C09K003-00; C09K003-18; D06M013-50; D06M015-643; C08J005-08; C08J007-04
CC 37-2 (Plastics Manufacture and Processing)
Section cross-reference(s): **40**, 42, 43, 46, 57
ST acryloyl morpholine fluorosilicone oligomer functionality modifier; **fiber** treating agent acryloylmorpholine fluorosilicone oligomer; paper treating agent acryloylmorpholine fluorosilicone oligomer; surface modifier polymer acryloylmorpholine fluorosilicone oligomer; water oil repellency acryloylmorpholine fluorosilicone oligomer; glass surface modifier acryloylmorpholine fluoro silicone
IT Polysiloxanes, preparation
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic; acryloylmorpholine-substituted acrylic fluorosilicone oligomeric functionality modifiers for polymers, **fibers**, paper, and glass)
IT Polyesters, properties
RL: MSC (Miscellaneous); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
(acryloylmorpholine-substituted acrylic fluorosilicone oligomeric functionality modifiers for polymers, **fibers**, paper, and glass)
IT **Fabric** finishing
(agents; acryloylmorpholine-substituted acrylic fluorosilicone oligomeric functionality modifiers for polymers, **fibers**, paper, and glass)
IT Coating materials

(**antisoiling**; acryloylmorpholine-substituted acrylic fluorosilicone oligomeric functionality modifiers for polymers, **fibers**, paper, and glass)

IT **Textiles**
(cotton; acryloylmorpholine-substituted acrylic fluorosilicone oligomeric functionality modifiers for polymers, **fibers**, paper, and glass)

IT Polyamide **fibers**, properties
Polyester **fibers**, properties
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
(**fabric**; acryloylmorpholine-substituted acrylic fluorosilicone oligomeric functionality modifiers for polymers, **fibers**, paper, and glass)

IT Metals, miscellaneous
RL: MSC (Miscellaneous)
(ions, absorbents for; acryloylmorpholine-substituted acrylic fluorosilicone oligomeric functionality modifiers for polymers, **fibers**, paper, and glass)

IT Paper
(kraft; acryloylmorpholine-substituted acrylic fluorosilicone oligomeric functionality modifiers for polymers, **fibers**, paper, and glass)

IT Coating materials
Coating materials
Coating materials
(oil- and water-resistant; acryloylmorpholine-substituted acrylic fluorosilicone oligomeric functionality modifiers for polymers, **fibers**, paper, and glass)

IT **336-64-1DP**, Di(perfluorobutyryl) peroxide, reaction products with acryloylmorpholine-vinylmethoxysilane oligomer **34434-27-0DP**, Bis(perfluorooctanoyl) peroxide, reaction products with acryloylmorpholine-vinylmethoxysilane oligomer **42514-14-7DP**, Di(perfluoroheptanoyl) peroxide, reaction products with acryloylmorpholine-vinylmethoxysilane oligomer 56347-79-6DP, Di(perfluoro-2-methyl-3-oxahexanoyl) peroxide, reaction products with acryloylmorpholine-vinylmethoxysilane oligomer 133414-71-8DP, reaction products with acryloylmorpholine-vinylmethoxysilane oligomer
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acryloylmorpholine-substituted acrylic fluorosilicone oligomeric functionality modifiers for polymers, **fibers**, paper, and glass)

IT 9002-86-2, Vinyl chloride homopolymer 25038-59-9, Poly(ethylene terephthalate), properties
RL: MSC (Miscellaneous); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
(acryloylmorpholine-substituted acrylic fluorosilicone oligomeric functionality modifiers for polymers, **fibers**, paper, and glass)

IT 7440-70-2, Calcium, processes
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(ions, absorption of; acryloylmorpholine-substituted acrylic fluorosilicone oligomeric functionality modifiers for polymers, **fibers**, paper, and glass)

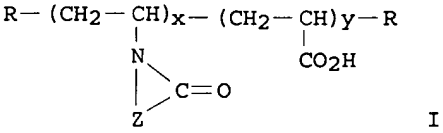
IT 179679-13-1DP, reaction products with perfluoroalkyl peroxides
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(oligomeric; acryloylmorpholine-substituted acrylic fluorosilicone oligomeric functionality modifiers for polymers, **fibers**, paper, and glass)

L117 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:36016 HCAPLUS
DOCUMENT NUMBER: 128:141482
TITLE: Fluoroalkyl- and vinylpyrrolidone- or vinylpiperidone-substituted acrylic oligomeric functionality modifier
INVENTOR(S): Yasue, Toshio; Sahada, Hideo
PATENT ASSIGNEE(S): Showa Denko K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10007738	A2	19980113	JP 1996-160268	1996 0620

PRIORITY APPLN. INFO.: JP 1996-160268 1996 0620

GI

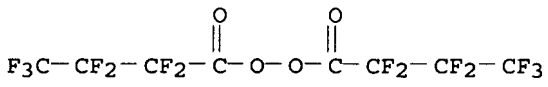


I

AB The modifiers, used for treatments of **fibers**, paper, and polymer surfaces and as surfactants and metal ion absorbents, contain fluoroalkyl-substituted oligomers I [R = (O-bridged) C1-25 fluoroalkyl; Z = (CH2)3, (CH2)4; x, y ≥1]. Thus, acrylic acid 24, di(perfluoro-2-methyl-3-oxahexanoyl) peroxide 5, and N-vinyl-2-pyrrolidone 25 mmol were treated at 40° for 5 h in AK 225 to give I [R = F7C3OCF(CF3), Z = (CH2)3], 1 part of which was mixed with 100 parts PhMe solution of Bu acrylate-Et acrylate-acrylonitrile-2-hydroxyethyl methacrylate copolymer (solid content 22%) and 10 parts DMF to give a **fiber** -treating agent. A solution containing thus obtained treating agent, 2,4,6-tri(N-methoxymethyl, N-methyl)amino-1,3,5-triazine, alkylbenzenesulfonic acids, and PhMe was applied on a nylon **woven fabric** and treated at 110-160° for 2 h to give a **fabric** showing good water and oil repellency.

IT **336-64-1DP**, Di(perfluorobutyryl) peroxide, reaction products with polyacrylic acid and vinylpyrrolidone
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(fluoroalkyl- and vinylpyrrolidone- or vinylpiperidone-substituted acrylic oligomeric functionality modifier for polymers, **fibers**, and paper)

RN 336-64-1 HCAPLUS
CN Peroxide, bis(2,2,3,3,4,4,4-heptafluoro-1-oxobutyl) (9CI) (CA INDEX NAME)



IC ICM C08F220-06
ICS B01F017-52; C08F226-06; C08F226-10; C09K003-00; D06M013-398; C09D133-02; C09D139-04

CC 37-2 (Plastics Manufacture and Processing)
Section cross-reference(s): **40**, 42, 43, 46

ST acrylic oligomer fluoroalkyl vinylpyrrolidone functionality modifier; **fiber** treatment acrylic vinylpiperidone fluoroalkyl oligomer; paper treatment acrylic vinylpyrrolidone fluoroalkyl oligomer; surfactant vinyl piperidone acrylic fluoroalkyl oligomer; metal ion absorbent acrylic fluoroalkyl oligomer; surface modifier polymer acrylic fluoroalkyl oligomer; water oil repellency acrylic fluoroalkyl oligomer

IT **Fabric** finishing
(agents; fluoroalkyl- and vinylpyrrolidone- or vinylpiperidone-substituted acrylic oligomeric functionality modifier for polymers, **fibers**, and paper)

IT Coating materials
(**antisoiling**; fluoroalkyl- and vinylpyrrolidone- or vinylpiperidone-substituted acrylic oligomeric functionality modifier for polymers, **fibers**, and paper)

IT Polyamide **fibers**, properties
Polyester **fibers**, properties
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
(**fabric**; fluoroalkyl- and vinylpyrrolidone- or vinylpiperidone-substituted acrylic oligomeric functionality modifier for polymers, **fibers**, and paper)

IT Surfactants
(fluoroalkyl- and vinylpyrrolidone- or vinylpiperidone-substituted acrylic oligomeric functionality modifier for polymers, **fibers**, and paper)

IT Polyesters, properties
RL: MSC (Miscellaneous); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
(fluoroalkyl- and vinylpyrrolidone- or vinylpiperidone-substituted acrylic oligomeric functionality modifier for polymers, **fibers**, and paper)

IT Absorbents
(for metal ion; fluoroalkyl- and vinylpyrrolidone- or vinylpiperidone-substituted acrylic oligomeric functionality modifier for polymers, **fibers**, and paper)

IT Metals, miscellaneous
RL: MSC (Miscellaneous)
(ions, absorbents for; fluoroalkyl- and vinylpyrrolidone- or vinylpiperidone-substituted acrylic oligomeric functionality modifier for polymers, **fibers**, and paper)

IT Paper
(kraft; fluoroalkyl- and vinylpyrrolidone- or vinylpiperidone-substituted acrylic oligomeric functionality modifier for polymers, **fibers**, and paper)

IT Coating materials
Coating materials
Coating materials
(oil- and water-resistant; fluoroalkyl- and vinylpyrrolidone- or vinylpiperidone-substituted acrylic oligomeric functionality modifier for polymers, **fibers**, and paper)

IT 88-12-0DP, N-Vinyl-2-pyrrolidone, reaction products with polyacrylic acid and perfluoroalkyl peroxide **336-64-1DP**, Di(perfluorobutyryl) peroxide, reaction products with polyacrylic acid and vinylpyrrolidone 4370-23-4DP, reaction products with

polyacrylic acid and perfluoroalkyl peroxide 9003-01-4DP, Poly(acrylic acid), reaction products with vinylpyrrolidone or vinylpiperidone and perfluoroalkyl peroxide 56347-79-6DP, Di(perfluoro-2-methyl-3-oxahexanoyl) peroxide, reaction products with polyacrylic acid and vinylpyrrolidone 133414-70-7DP, reaction products with polyacrylic acid and vinylpyrrolidone
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(fluoroalkyl- and vinylpyrrolidone- or vinylpiperidone-substituted acrylic oligomeric functionality modifier for polymers, **fibers**, and paper)

IT 9002-86-2, Vinyl chloride homopolymer 25038-59-9, Poly(ethylene terephthalate), properties
RL: MSC (Miscellaneous); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
(fluoroalkyl- and vinylpyrrolidone- or vinylpiperidone-substituted acrylic oligomeric functionality modifier for polymers, **fibers**, and paper)

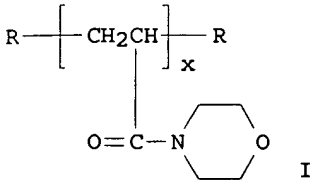
IT 7440-70-2, Calcium, processes
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(ions, absorption of; fluoroalkyl- and vinylpyrrolidone- or vinylpiperidone-substituted acrylic oligomeric functionality modifier for polymers, **fibers**, and paper)

L117 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:36013 HCAPLUS
DOCUMENT NUMBER: 128:141481
TITLE: Acryloylmorpholine- and fluoroalkyl-substituted acrylic oligomeric functionality modifiers
INVENTOR(S): Yasue, Toshio; Sawada, Hideo
PATENT ASSIGNEE(S): Showa Denko K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10007731	A2	19980113	JP 1996-160269	19960620

PRIORITY APPLN. INFO.: JP 1996-160269 19960620

GI

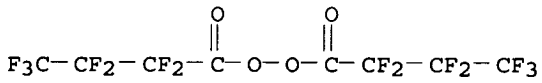


I

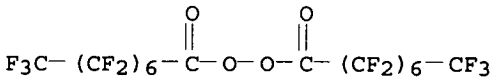
AB The modifiers, used for treatments of **fibers**, paper, and polymer surfaces and as surfactants and metal ion absorbents, contain acryloylmorpholine- and fluoroalkyl-substituted oligomers I [R = (CF2)nF, CF(CF3)O[CF2(CF3)O]mC3F7; n = 1-15; m = 0-6; x ≥1]. Thus, 3.29 g di(perfluoro-2-methyl-3-oxahexanoyl) peroxide and 3.39 g acryloylmorpholine were treated at 45° for 5 h in AK 225 to give I [R = F7C3OCF(CF3)], 1 part of which was mixed with 100 parts PhMe solution of Bu acrylate-Et acrylate-acrylonitrile-2-hydroxyethyl methacrylate copolymer (solid content 22%) and 10 parts DMF to give a **fiber** -treating agent. A solution containing thus obtained treating agent, 2,4,6-tri(N-methoxymethyl, N-methyl)amino-1,3,5-triazine, alkylbenzenesulfonic acids, and PhMe was applied on a nylon **woven fabric** and treated at 110-160° for 2 h to give a treated **fabric** showing good water and oil repellency.

IT **336-64-1DP**, Di(perfluorobutyryl) peroxide, reaction products with acryloylmorpholine oligomer **34434-27-0DP**, Bis(perfluorooctanoyl) peroxide, reaction products with acryloylmorpholine oligomer **42514-14-7DP**, Di(perfluoroheptanoyl) peroxide, reaction products with acryloylmorpholine oligomer
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acryloylmorpholine- and fluoroalkyl-substituted acrylic oligomeric functionality modifiers for polymers, **fibers**, and paper)

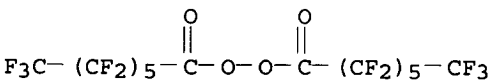
RN 336-64-1 HCAPLUS
CN Peroxide, bis(2,2,3,3,4,4,4-heptafluoro-1-oxobutyl) (9CI) (CA INDEX NAME)



RN 34434-27-0 HCAPLUS
CN Peroxide, bis(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-oxooctyl) (9CI) (CA INDEX NAME)



RN 42514-14-7 HCAPLUS
CN Peroxide, bis(2,2,3,3,4,4,5,5,6,6,7,7,7-tridecafluoro-1-oxoheptyl) (9CI) (CA INDEX NAME)



IC ICM C08F126-10
ICS B01F017-52; C08F126-06; C09K003-00; D06M013-398; C09D139-04

CC 37-2 (Plastics Manufacture and Processing)
Section cross-reference(s): **40**, 42, 43, 46

ST acryloyl morpholine fluoroalkyl oligomer functionality modifier; **fiber** treating agent acryloylmorpholine fluoroalkyl oligomer; paper treating agent acryloylmorpholine fluoroalkyl oligomer; surfactant acryloylmorpholine fluoroalkyl oligomer;

metal ion absorbent acryloylmorpholine fluoroalkyl oligomer; surface modifier polymer acryloylmorpholine fluoroalkyl oligomer; water oil repellency acryloylmorpholine fluoroalkyl oligomer

IT Surfactants
(acryloylmorpholine- and fluoroalkyl-substituted acrylic oligomeric functionality modifiers for polymers, **fibers**, and paper)

IT Polyesters, properties
RL: MSC (Miscellaneous); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
(acryloylmorpholine- and fluoroalkyl-substituted acrylic oligomeric functionality modifiers for polymers, **fibers**, and paper)

IT **Fabric** finishing
(agents; acryloylmorpholine- and fluoroalkyl-substituted acrylic oligomeric functionality modifiers for polymers, **fibers**, and paper)

IT Coating materials
(**antisoiling**; acryloylmorpholine- and fluoroalkyl-substituted acrylic oligomeric functionality modifiers for polymers, **fibers**, and paper)

IT **Textiles**
(cotton; acryloylmorpholine- and fluoroalkyl-substituted acrylic oligomeric functionality modifiers for polymers, **fibers**, and paper)

IT Polyamide **fibers**, properties
Polyester **fibers**, properties
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
(**fabric**; acryloylmorpholine- and fluoroalkyl-substituted acrylic oligomeric functionality modifiers for polymers, **fibers**, and paper)

IT Absorbents
(for metal ion; acryloylmorpholine- and fluoroalkyl-substituted acrylic oligomeric functionality modifiers for polymers, **fibers**, and paper)

IT Metals, miscellaneous
RL: MSC (Miscellaneous)
(ions, absorbents for; acryloylmorpholine- and fluoroalkyl-substituted acrylic oligomeric functionality modifiers for polymers, **fibers**, and paper)

IT Paper
(kraft; acryloylmorpholine- and fluoroalkyl-substituted acrylic oligomeric functionality modifiers for polymers, **fibers**, and paper)

IT Coating materials
Coating materials
Coating materials
(oil- and water-resistant; acryloylmorpholine- and fluoroalkyl-substituted acrylic oligomeric functionality modifiers for polymers, **fibers**, and paper)

IT **336-64-1DP**, Di(perfluorobutyryl) peroxide, reaction products with acryloylmorpholine oligomer **34434-27-0DP**, Bis(perfluorooctanoyl) peroxide, reaction products with acryloylmorpholine oligomer **42514-14-7DP**, Di(perfluoroheptanoyl) peroxide, reaction products with acryloylmorpholine oligomer 56347-79-6DP, Di(perfluoro-2-methyl-3-oxahexanoyl) peroxide, reaction products with acryloylmorpholine oligomer 133414-70-7DP, reaction products with acryloylmorpholine oligomer 133414-71-8DP, reaction products with acryloylmorpholine oligomer
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acryloylmorpholine- and fluoroalkyl-substituted acrylic oligomeric functionality modifiers for polymers, **fibers**

, and paper)
IT 9002-86-2, Vinyl chloride homopolymer 25038-59-9, Poly(ethylene terephthalate), properties
RL: MSC (Miscellaneous); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
(acryloylmorpholine- and fluoroalkyl-substituted acrylic oligomeric functionality modifiers for polymers, **fibers**, and paper)
IT 7440-70-2, Calcium, processes
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(ions, absorption of; acryloylmorpholine- and fluoroalkyl-substituted acrylic oligomeric functionality modifiers for polymers, **fibers**, and paper)
IT 28902-82-1DP, Acryloylmorpholine homopolymer, reaction products with perfluoroalkyl peroxides
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(oligomeric; acryloylmorpholine- and fluoroalkyl-substituted acrylic oligomeric functionality modifiers for polymers, **fibers**, and paper)

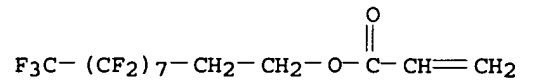
L117 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:787921 HCAPLUS
DOCUMENT NUMBER: 128:76565
TITLE: Polyvinyl chloride-finished mesh sheets and method for protecting the sheets from abrasion, blooming, outdoor exposure and soiling
INVENTOR(S): Sakobe, Ikou; Ishikawa, Kunihiro
PATENT ASSIGNEE(S): Unitika Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09316780	A2	19971209	JP 1996-137951	1996 0531
PRIORITY APPLN. INFO.:			JP 1996-137951	1996 0531

AB The sheets useful for replacing conventional tarps in their typical applications are coated with a composition containing (A) copolymers derived from fluorinated or/and siloxane-modified (meth)acrylates and other (meth)acrylate monomers, (B) homopolymers bearing (meth)acryloyl groups and (C) fluoroolefin polymers for preventing the bleeding of PVC processing aids such as plasticizers and improving the resistance to abrasion, snow and soiling. Thus, dipping a **woven fabric** of polyester **fibers** in a mixture of PVC 100, di(2-methylhexyl) phthalate 60, CaCO3 20, Zn stearate 3 and pigment 10 parts and heating gave a plastic tarp which was coated with a composition of F-containing siloxane methacrylate polymer 10, PMMA 50 and a tetrafluoroethylene-vinylidene chloride copolymers 40 parts to give a sheet with good resistance to abrasion, snow and soiling.
IT **27905-45-9D**, 2-(Perfluorooctyl)ethyl acrylate, polymers with (meth)acrylate compds. bearing siloxane groups and comonomers

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(protective coating for use on polyvinyl chloride-finished synthetic tarps with good resistance to abrasion, blooming, outdoor exposure and soiling)

RN 27905-45-9 HCAPLUS
CN 2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl ester (9CI) (CA INDEX NAME)



IC ICM D06M015-248
ICS D06M015-277
CC 40-9 (**Textiles** and **Fibers**)
Section cross-reference(s): 38, **42**
IT Coating materials
(**antisoiling**; protective coating for use on polyvinyl chloride-finished synthetic tarps with good resistance to abrasion, blooming, outdoor exposure and soiling)
IT Polyester **fibers**, uses
RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(plastic tarps; protective coating for use on polyvinyl chloride-finished synthetic tarps with good resistance to abrasion, blooming, outdoor exposure and soiling)
IT 80-62-6D, Methyl methacrylate, graft copolymers with methacryloyloxypropyldimethylsilyl- and trimethylsilyl-terminated siloxanes, and F-containing (meth)acrylate compds. 9010-88-2, Dianal BR-64 25034-86-0, Dianal BR-80 25190-89-0, Kynar ADS 25684-76-8, Kynar SL **27905-45-9D**, 2-(Perfluorooctyl)ethyl acrylate, polymers with (meth)acrylate compds. bearing siloxane groups and comonomers 31900-57-9D, Dimethylsilanediol homopolymer, methacryloyloxypropyldimethylsilyl- and trimethylsilyl-terminated, graft polymers with F-containing (meth)acrylate compds. and other comonomers 123109-42-2D, Polydimethylsiloxane, methacryloyloxypropyldimethylsilyl-and trimethylsilyl-terminated, polymers with F-containing (meth)acrylate compds. and other comonomers 138931-88-1, Dianal BR-108
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(protective coating for use on polyvinyl chloride-finished synthetic tarps with good resistance to abrasion, blooming, outdoor exposure and soiling)

L117 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:636701 HCAPLUS
DOCUMENT NUMBER: 125:250587
TITLE: Water- and oil-repellent agents of fluoropolymers with improved soiling resistance
INVENTOR(S): Ito, Katsuji; Yamauchi, Masaru
PATENT ASSIGNEE(S): Asahi Glass Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 08199111	A2	19960806	JP 1995-11004	1995 0126
JP 3463391	B2	20031105		
PRIORITY APPLN. INFO.:			JP 1995-11004	1995 0126

AB The water-dispersed agents with good dry soiling resistance for **fibers** and **fabrics** contain 100 parts of polymers having structural units of polyfluoroalkyl-containing α, β-unsatd. compds. and 10-60 parts fluoroolefin polymers. Thus, a **fabric** was dipped in a 2/0.5 mixture of a fluoropolymer prepared from cyclohexyl vinyl ether 38.0, Et vinyl ether 22.1, hydroxybutyl vinyl ether 1.5, and CH2:CHO(CH2)4(OCH2CH2)nOH (n = 1-10) 4.5% and another fluoropolymer prepared from p-fluoroalkylethyl acrylate 140, vinyl chloride 40, 2-hydroxyethyl acrylate 8, and dioctyl maleate 12 parts, dried at 110° for 90 s, and heated at 170° for 60 s to give a test piece showing good water and oil repellency and dry soiling resistance for polyester and cotton **fabrics.**

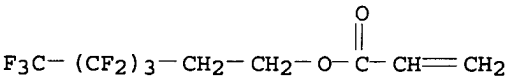
IT **182359-38-2P 182359-39-3P**
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(water- and oil-repellents of fluoropolymers with improved soiling resistance)

RN 182359-38-2 HCAPLUS

CN 2-Butenedioic acid (2Z)-, bis(2-ethylhexyl) ester, polymer with chloroethene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl 2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-propenoate, 2-hydroxyethyl 2-propenoate, 3,3,4,4,5,5,6,6,6-nonafluorohexyl 2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluorotetradecyl 2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl 2-propenoate (9CI) (CA INDEX NAME)

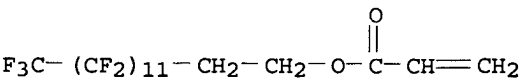
CM 1

CRN 52591-27-2
CMF C9 H7 F9 O2



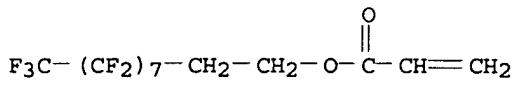
CM 2

CRN 34395-24-9
CMF C17 H7 F25 O2



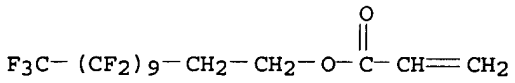
CM 3

CRN 27905-45-9
CMF C13 H7 F17 O2



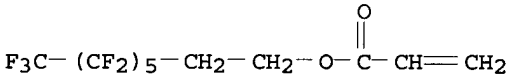
CM 4

CRN 17741-60-5
CMF C15 H7 F21 O2



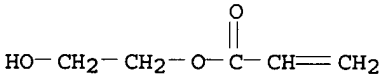
CM 5

CRN 17527-29-6
CMF C11 H7 F13 O2



CM 6

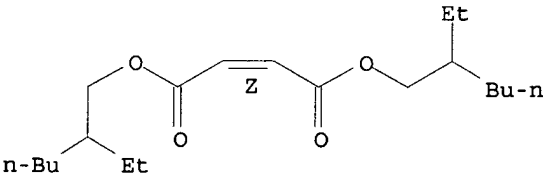
CRN 818-61-1
CMF C5 H8 O3



CM 7

CRN 142-16-5
CMF C20 H36 O4

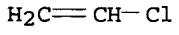
Double bond geometry as shown.



CM 8

CRN 75-01-4

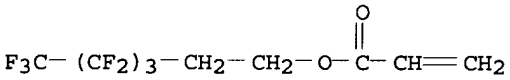
CMF C2 H3 Cl



RN 182359-39-3 HCAPLUS
CN 2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorododecyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-propenoate, 2-hydroxyethyl 2-propenoate, 3,3,4,4,5,5,6,6,6-nonafluorohexyl 2-propenoate, octadecyl 2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluorotetradecyl 2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl 2-propenoate (9CI) (CA INDEX NAME)

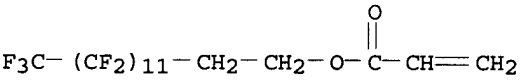
CM 1

CRN 52591-27-2
CMF C9 H7 F9 O2



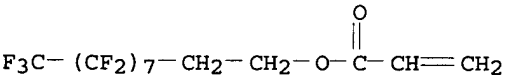
CM 2

CRN 34395-24-9
CMF C17 H7 F25 O2



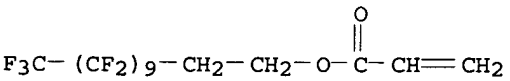
CM 3

CRN 27905-45-9
CMF C13 H7 F17 O2



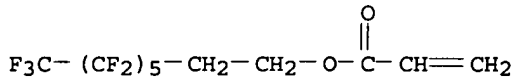
CM 4

CRN 17741-60-5
CMF C15 H7 F21 O2



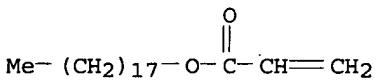
CM 5

CRN 17527-29-6
CMF C11 H7 F13 O2



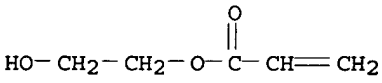
CM 6

CRN 4813-57-4
CMF C21 H40 O2



CM 7

CRN 818-61-1
CMF C5 H8 O3



IC ICM C09D127-12
ICS C09D133-14; C09K003-00; C09K003-18; D06M015-277
CC 42-10 (**Coatings**, Inks, and Related Products)
Section cross-reference(s): **40**
ST oil water repellent fluoropolymer; water dispersed water oil repellent fluoropolymer; soiling resistance **fabric** fluoropolymer
IT **Textiles**
(substrates; water- and oil-repellents of fluoropolymers with improved soiling resistance for **fabric** coating)
IT Coating materials
(**antisoiling**, water- and oil-repellents of fluoropolymers with improved soiling resistance)
IT 126682-75-5P 182359-37-1P **182359-38-2P**
182359-39-3P 182359-40-6P 182359-41-7P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(water- and oil-repellents of fluoropolymers with improved soiling resistance)

L117 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1987:424741 HCAPLUS
DOCUMENT NUMBER: 107:24741
TITLE: Soiling-resistant synthetic **fibers**
INVENTOR(S): Shinonome, Osami; Kitahara, Takeshi; Murakami, Shiro
PATENT ASSIGNEE(S): Unitika Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61245370	A2	19861031	JP 1985-85168	1985 0418
PRIORITY APPLN. INFO.:			JP 1985-85168	1985 0418

AB Title **fibers** having fine projections on the surface are composed of heterogeneous mixts. of thermoplastic polymers and polymers having higher glass transition temperature than that of the thermoplastic polymers and are coated with F-containing films. Poly(ethylene terephthalate) (90 parts) was mixed with 10 parts polyarylates obtained by polymerization of bisphenol A and 1:1 mol terephthaloyl chloride and isophthaloyl chloride, and 0.5 part Bu2HPO4, kneaded at 270° for 4 min, melt **spun** at 280°, taken up on a roller at 6000 m/min, and coated with 2-chloroethyl vinyl ether-2-hydroxyethyl acrylate-2-perfluorooctylethyl acrylate-vinyl chloride copolymer dispersed in mineral oil to obtain **fibers** (75 denier/16 filament) which had fine projections on the surface and showed strength 3.2 g/denier and elongation 43%.

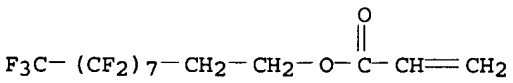
IT **92213-60-0**, 2-Chloroethylvinyl ether-2-hydroxyethyl acrylate-2-perfluorooctylethyl acrylate-vinyl chloride copolymer
RL: USES (Uses)
(coating, for polyester-polyarylate bicomponent **fibers**, for good soil resistance)

RN 92213-60-0 HCAPLUS

CN 2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl ester, polymer with chloroethene, (2-chloroethoxy)ethene and 2-hydroxyethyl 2-propenoate (9CI) (CA INDEX NAME)

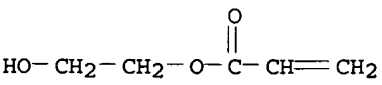
CM 1

CRN 27905-45-9
CMF C13 H7 F17 O2



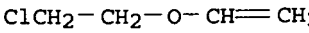
CM 2

CRN 818-61-1
CMF C5 H8 O3



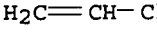
CM 3

CRN 110-75-8
CMF C4 H7 Cl O



CM 4

CRN 75-01-4
CMF C2 H3 Cl



IC ICM D06M015-00
ICS D06M013-00
ICA D01F011-08
CC 40-5 (**Textiles** and **Fibers**)
Section cross-reference(s): **42**
ST polyester **fiber** soiling resistant; fluoroacrylic coating **antisoiling** polyester **fiber**; polyarylate **fiber** bicomponent PET; chloroethoxyethylene copolymer **antisoiling** coating **fiber**; hydroxyethyl acrylate copolymer **antisoiling** coating; fluorooctylethyl acrylate copolymer **antisoiling** coating; vinyl chloride copolymer **antisoiling** coating
IT Polyester **fibers**, uses and miscellaneous
RL: USES (Uses)
(bicomponent containing bisphenol A polyarylates, coatings for, fluoroacrylic polymers as, for soiling resistance)
IT Coating materials
(fluoroacrylic polymers, for polyester-polyarylate bicomponent **fibers**)
IT **92213-60-0**, 2-Chloroethylvinyl ether-2-hydroxyethyl acrylate-2-perfluorooctylethyl acrylate-vinyl chloride copolymer
RL: USES (Uses)
(coating, for polyester-polyarylate bicomponent **fibers**, for good soil resistance)
IT 25639-68-3, Bisphenol A-isophthaloyl chloride-terephthaloyl chloride copolymer 39281-59-9
RL: USES (Uses)
(**fibers** containing PET and, coatings for, fluoroacrylic polymers as, for soiling resistance)

L117 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1987:34579 HCAPLUS
DOCUMENT NUMBER: 106:34579
TITLE: Soil release composition and its use
INVENTOR(S): Hisamoto, Iwao; Hirai, Masaru; Ishikawa, Sueyoshi
PATENT ASSIGNEE(S): Daikin Industries, Ltd., Japan
SOURCE: Eur. Pat. Appl., 29 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 195323	A2	19860924	EP 1986-103005	19860306
EP 195323	A3	19881109		

EP 195323	B1	19920826		
R: DE, FR, GB				
US 4695488	A	19870922	US 1986-835754	1986 0303
JP 62007782	A2	19870114	JP 1986-52296	1986 0310
JP 04003788	B4	19920124		
CN 86101422	A	19860924	CN 1986-101422	1986 0312
CN 1004420	B	19890607		
PRIORITY APPLN. INFO.:			JP 1985-49944 A	1985 0312

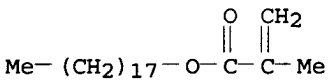
AB Coatings containing vinyl polymers with pendant fluoroalkyl oxyalkylene groups, hydrophilic resins, and, optionally, water and oil repellents have good oil and soil resistance and water absorption or repellency and are useful on plastics, **fabrics**, and paper. A mixture of C2F5(CF2CF2)nCH2CH(OH)CH2OZCOCMe:CH2-HOZCOCMe:CH2 copolymer [Z = polyoxyethylene; n 2, 3, 4, 5, 6 = 3, 55, 28, 12, and 3%, resp.] 0.5, Sumitex-901 0.5, Sumitex-102 0.5, and Zn(NO3)2 0.5 part, coated on nylon **cloth**, had H2O absorption 30 and 30 s and oil repellency (100 = best, 0 = worst) 90 and 70 before and after washing, resp.; vs. >60, >60, 80, and 70, resp., for a polymer without oxyalkylene groups in the fluoroalkyl pendent group.

IT **92708-16-2 106185-99-3**
RL: USES (Uses)
(soilproofing agents, for **fabrics** and coatings)

RN 92708-16-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-propenoate (9CI) (CA INDEX NAME)

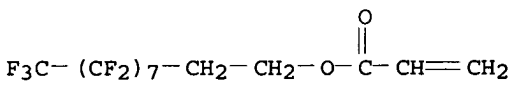
CM 1

CRN 32360-05-7
CMF C22 H42 O2



CM 2

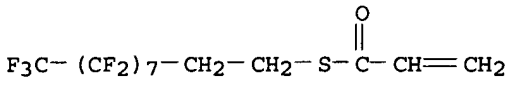
CRN 27905-45-9
CMF C13 H7 F17 O2



RN 106185-99-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with S-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl) 2-propenethioate (9CI) (CA INDEX NAME)

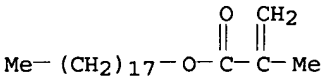
CM 1

CRN 106185-98-2
CMF C13 H7 F17 O S



CM 2

CRN 32360-05-7
CMF C22 H42 O2



IC ICM C08L033-16
ICS D06M015-277
CC 40-9 (**Textiles** and **Fibers**)
Section cross-reference(s): **42**, 43
IT Urethane polymers, uses and miscellaneous
RL: USES (Uses)
(in soilproofing agents for **fabrics** and coatings)
IT Polyamide **fibers**, uses and miscellaneous
Polyester **fibers**, uses and miscellaneous
RL: USES (Uses)
(soilproofing finishes for, polyethylene glycol fluoroalkyl ether methacrylate polymers as)
IT Oilproofing
Soilproofing
(agents, polyethylene glycol fluoroalkyl ether methacrylate polymers, for **textiles**)
IT Coating materials
(**antisoiling**, polyethylene glycol fluoroalkyl ether methacrylate polymers)
IT 136-84-5 9003-08-1 59763-47-2 67167-00-4 106254-20-0
106254-21-1 106255-46-3 106255-51-0 106255-55-4
RL: USES (Uses)
(in soilproofing agents for **fabrics** and coatings)
IT 100-42-5D, polymers with polyethylene glycol fluoroalkyl ether methacrylates 106-91-2D, Glycidyl methacrylate, polymers with polyethylene glycol fluoroalkyl ether methacrylates 141-32-2D, polymers with polyethylene glycol fluoroalkyl ether methacrylates 924-42-5D, polymers with polyethylene glycol fluoroalkyl ether methacrylates 9003-53-6D, Polystyrene, thioalkyl acrylate derivs., polymers with polyethylene glycol fluoroalkyl ether methacrylates 25736-86-1D, perfluoroalkyl ethers, copolymers 25736-86-1D, polymers with polyethylene glycol fluoroalkyl ether methacrylates **92708-16-2 106185-99-3**
RL: USES (Uses)
(soilproofing agents, for **fabrics** and coatings)

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